







STUDIES IN ECONOMICS AND POLITICAL SCIENCE

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A HISTORY

OF

FACTORY LEGISLATION



A HISTORY OF FACTORY LEGISLATION.

By B. L. HUTCHINS AND A. HARRISON, B.A. (Lond.).

WITH A PREFACE BY SIDNEY WEBB,

AUTHOR OF "INDUSTRIAL DEMOCRACY," ETC.

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PREFACE.

It is remarkable that no systematic and complete history of the English Factory Acts should hitherto have been published. The experimental legislation of the elder Sir Robert Peel, expanded by Robert Owen into a general principle of industrial government, and applied in tentative instalments by successive generations of Home Office administrators, has spread to every industrial community in the Old World and the New. Of all the nineteenth century inventions in social organisation, Factory Legislation is the most widely diffused. opening of the twentieth century finds it prevailing over a larger area than the public library or the savings bank: it is, perhaps, more far-reaching, if not more ubiquitous, than even the public elementary school or the policeman.

The system of regulation which began with the protection of the tiny class of pauper apprentices in textile mills now includes within its scope every manual worker in every manufacturing industry. From the hours of labour and sanitation, the law has extended to the age of commencing work, protection against accidents, meal-times and holidays,

the methods of remuneration, and, in the most progressive of English-speaking communities, to the rate of wages itself.1 The range of Factory Legislation has, in fact, in one country or another, become co-extensive with the conditions of industrial employment. No class of manual-working wageearners, no item in the wage-contract, no age, no sex, no trade or occupation, is now beyond its scope. This part, at any rate, of Robert Owen's social philosophy has commended itself to the practical judgment of the civilised world. It has even, though only towards the latter part of the nineteenth century, converted the economists themselves; and the advantage of Factory Legislation is now as soundly "orthodox" among the present generation of English, German, and American professors as "laissez-faire" was to their predecessors.

So fruitful an experiment deserves a systematic record in the country of its origin. The series of enactments, beginning with the "Health and Morals of Apprentices Act, 1802," and ending, for the moment, with the "Factory and Workshops Acts Consolidation Act, 1901," has, indeed, a whole

¹ For an interesting account of the latest developments of Factory Legislation the reader should consult State Experiments in Australia and New Zealand, by the Hon. W. P. Reeves (London: 1902). For a fuller analysis of the ideas contained in this preface, the writer may be permitted to refer to Industrial Democracy, second edition (London: 1902), by S. and B. Webb. The bibliography at the end of the book should also be consulted.

literature of its own, which is, for the first time, exhaustively catalogued in an appendix to this work. The movement has called forth several incomplete chronicles and historical sketches, the principal of which are Kydd's "History of the Factory Movement" (1857) and the various essays by Mr. R. W. Cooke Taylor, Mr. George Howell, and Miss Victorine Jeans. English Factory Legislation has attracted at different stages the attention of competent French and German students, from Villermé, Wolowski, and Léon Faucher in the early "forties," to (not to speak of writers of more general works) such able monographers as Ernst von Plener, in 1872, and Otto Weyer, in 1888. But it has been left to the authors of the present volume systematically to explore the origins of the Act of 1802, and to trace, in detail, from that small beginning, the century-long development of the present highly-organised system of factory and workshop regulation in the United Kingdom.

This century of experiment in Factory Legislation affords a typical example of English practical empiricism. We began with no abstract theory of social justice or the rights of man. We seem always to have been incapable even of taking a general view of the subject we were legislating upon. Each successive statute aimed at remedying a single ascertained evil. It was in vain that objectors urged that other evils, no more defensible, existed in other trades, or among other classes, or

with persons of other ages than those to which the particular Bill applied. Neither logic nor consistency, neither the over-nice consideration of even-handed justice nor the Quixotic appeal of a general humanitarianism, was permitted to stand in the way of a practical remedy for a proved wrong. That this purely empirical method of dealing with industrial evils made progress slow is scarcely an objection to it. With the nineteenth century House of Commons no other method would have secured any progress at all. More serious is the drawback of the unevenness of the progress. Some industries—cotton spinning, for example are now so thoroughly guarded by Common Rules, enforced either by the factory inspector or by the jointly-acting officials of the Trade Union and the Employers' Association, that no individual millowner and no individual operative can go far in degrading the standard of life. We have, in the course of a century, in this particular trade, so strictly fenced off the downward way that competition, as far as the manufacturing process is concerned, is exclusively concentrated upon the upward way. How potently the additional freedom which the law thus secures, to master as well as to man, has reacted on the efficiency of the industry is, at the opening of the twentieth century, one of our proudest boasts. In spite of the keenest foreign competition, the Lancashire cotton mill, in point of technical efficiency, still leads the world,

and the Lancashire cotton spinner, once in the lowest depths of social degradation, now occupies, as regards the general standard of life of a whole trade, perhaps the foremost position among English wage-earners.

On the other hand, in such "sweated" London industries as the manufacture of slop clothing or low-grade furniture, Factory Legislation is, after half a century of agitation, found only in its most rudimentary form. No effective Common Rules prevent any employer or any operative from competing in the downward way at "earnings barely sufficient to sustain existence; hours of labour such as to make the lives of the workers periods of almost ceaseless toil; sanitary conditions injurious to the health of the persons employed and dangerous to the public." The state of the London slop-clothing and low-grade furniture trades in 1902 is, in fact, closely parallel to that of the Lancashire cotton trade in 1802. It is now more than twelve years since the gravity of the evil was authoritatively laid bare by the House of Lords Select Committee on the Sweating System. It is known, as certainly as a hundred years of experiment can make anything known, by what line of action the evil can be remedied. Yet so imperfectly are our legislators and the public acquainted with the nineteenth century history of their own country that practically nothing has been

¹ Final Report of the Select Committee of the House of Lords on the Sweating System, 1890.

done. The sweated trades remain, at the opening of the twentieth century, as free from any effective Common Rules as was the factory system at the beginning of the nineteenth.

Such sweated trades, far from bringing any profit to the community, are not even self-supporting. In denying to their unfortunate operatives sufficient food, clothing, and rest to keep up their strength, and housing accommodation and sanitation such as to maintain them in health, these industries are extracting more energy than their wages and other conditions suffice to make good, with the result that, after a relatively few years of demoralising toil, the sweated workers are flung, prematurely exhausted, on the social rubbish heap of charity or the Poor Law. It is, indeed, unfortunately only too true that the sweated trades literally use up the men, women, and children who work at them, as omnibus companies use up their horses. unlike the omnibus companies, the employers in these industries are supplied with successive relays of workers without any charge for rearing them. Thus, the sweated trades are, in the strictest sense, parasitic upon the rest of the community. Without the subsidy continually afforded to them in the shape of human energy, they could not continue beyond a very brief generation. As things are, they constitute a standing drain upon the vitality of the race.

Unfortunately, in the absence of regulation, the

evil tends to increase and the sweated trades to spread. In the all-pervading competition of the modern world-market, each industry is perpetually struggling against every other industry to maintain and to improve its position-each trade is continuously bidding against every other trade-tempting the consumer by cheapness continually to increase his demand for its commodities, inducing the investor by swollen profits to divert more and more of the nation's capital in its direction, and attracting, by large salaries, more and more of the nation's brains to its service. In the competition for the foreign market, in particular, product jostles with product in a manner that can scarcely be overlooked. The mere fact that we import foreign produce compels a certain though varying total amount of export sales, but which articles the foreigner will buy depends on their relative cheapness to him. Hence, the development of an increased export trade in slop clothing may well have something to do with the check to our export sales of textiles or machinery. The diminution in the Northumberland coal shipments may be ultimately caused by a contemporary expansion in the foreign sales of East End boots and shoes. Now, although the sweated industries are unprofitable to the community as a whole, and demoralising to their operatives, the subsidy which they enjoy enables them to offer their products at low prices. They thus secure a large, and even a growing, trade. The mere extent of this trade

permits of large profits to investors, and high salaries to managers. They thus obtain the services of an extensive, and even an increasing, share of the nation's capital and brains. How seriously an analogous bounty might warp the distribution of the nation's industry was clearly perceived by the shrewd critics of the old Poor Law. "Whole branches of manufacture," they point out, "may thus follow the course, not of coal mines or of streams, but of pauperism; may flourish like the fungi that spring from corruption in consequence of the abuses which are ruining all the other interests of the places in which they are established, and cease to exist in the better administered districts in consequence of that better administration." Hence the morass of sweating not only continues, but actually spreads, absolutely, if not relatively. At no previous period, we may confidently affirm, was there so great a total number of people, in London and elsewhere, employed under conditions falling within the House of Lords' definition of sweated workers, as in this year of grace 1902.

The discovery of the danger of uneven Factory Legislation reveals also the principle that we now see to underlie it. The experience of every advanced industrial community proves that, in the absence of regulation, there will be at least some trades in

¹ First Report of Poor Law Inquiry Commissioners, 1834, p. 65 of reprint.

which at least some workers will be driven to exist under conditions so exhausting and demoralising as to be injurious to the community. Nor is the evil a transient one, righting itself in due course. If nothing is done to prevent it these trades become parasitic on the rest of the community, and are positively fostered, at the expense of the others, by what is virtually a continuous bounty or subsidy. It is the object of Factory Legislation to hinder the diversion of the nation's industry into such unprofitable channels; to maintain a healthy minimum in the standard of life; and to prevent any person being employed under conditions inimical to social health. "Every society is judged and survives," aptly said Mr. Asquith in 1901, "according to the material and moral minimum which it prescribes to its members." "The ultimate end of factory legislation," approvingly wrote the Times in 1874, "is to prescribe conditions of existence below which population shall not decline."1

The modern economist agrees on this point with the *Times* of 1874, and the ex-Home Secretary of 1901. It is, however, not the object of the authors of the following pages to enforce this or any other view. As historical students, Miss Hutchins and Miss Harrison have confined themselves, with commendable restraint, to stating the facts, leaving to the reader the option of regarding the whole century of Factory Legislation either as a triumph

¹ Post, p. 172.

of statesmanship or a series of blunders, whichever he prefers. In a valuable appendix Mr. G. H. Wood gives all the statistical data that exist for an estimate of the total effect of the earlier Factory Acts on women's wages. The reader has thus before him all the available materials for a judgment, with the fullness and exactness of bibliographical reference that are nowadays rightly demanded. Whatever we may think of the policy of Factory Legislation, we must all regard it as an advantage to have the story told with honest exactitude, and it is as such an historical study that I venture to commend this volume.

SIDNEY WEBB.

41, Grosvenor Road, Westminster, Christmas, 1902.

NOTE BY THE AUTHORS.

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B.L.H.



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HISTORY OF

FACTORY LEGISLATION.

CHAPTER I.

THE ORIGIN OF FACTORY LEGISLATION.

The Poor Law of Elizabeth—Children's Labour in the Eighteenth Century—Parish Apprentices—Fever at Manchester—Dr. Percival—Advocacy of Inspection and Control.

THE year 1802 is marked by the passing of the first of the long series of statutes regulating the hours and conditions of labour, commonly known as the Factory Acts. These Acts have been framed with the definite and avowed object of protecting the health of the younger and weaker workers from injury by overwork or unwholesome conditions, and it is this, their motive and purpose, rather than the actual matter of the regulations, that forms their distinguishing characteristic and marks them out as a novelty and new departure from previous legislation. There is little or no analogy between these and the mediæval labour statutes or the ordinances of the craft guilds. The working day prescribed by the Elizabethan Statute of Apprentices was frankly an "imposition," not a "limitation" of labour, as the late Professor Jevons put it, and was intended to prevent, not overwork, but idleness. The guild prohibitions of work at night seem to have been partly due to the desire to maintain a high standard of quality in the product which might be endangered by night work, the prescription of holidays partly to religious motives, and

F.L.

both probably also to the idea that as the normal citizen went to church on festivals and slept at night, it was unfair that he should be injured in his business by the competition of those who infringed these orderly customs. There were a number of other statutes in mediæval and early modern times which purported to regulate industrial processes and methods, sometimes in great detail. Some of these regulations were intended to keep up the efficiency and reputation of the industry, others had to do with wages and apprenticeship questions, and some were aimed at maintaining the old-fashioned craftsman organisation of industry in towns and putting a check on the growth of "free," i.e., unregulated, industry in the country. Many of these regulations are of great interest in themselves, and not without a bearing on certain modern questions, such as trade unionism, the sweating system and others. They have, however, little or nothing in common with the protection of health by Factory Acts, and may therefore for present purposes be disregarded. The movement for the regulation of factories was, as we shall see, the outcome of a new attitude of mind towards industrial questions, which was itself part of the intellectual development of the eighteenth century. The Factory Acts are, however, in their origin linked with another series of ancient enactments which in scope and purpose might seem to have little or no connection with them.

The Factory Act of 1802, the first of all, may be regarded rather as an extension of the old Poor Law than as the conscious assumption of control over industry. It will be remembered that the Elizabethan Poor Law of 1601 had directed that destitute children and orphans should be apprenticed to some trade. Houses of industry for instructing these children in spinning and weaving were a favourite charitable hobby in the seventeenth and

¹ This subject is more fully discussed from mutually opposed points of view by Professor Ashley, "English Economic History," Part I., p. 90, and Brentano, "History of Guilds," p. cxxx.

eighteenth centuries, and the children were subsequently bound apprentice to employers. There is a considerable literature on this subject, sometimes giving a roseate description of the interiors of these industrial schools, which does not always convey to the modern reader an impression as favourable as the writer intended.

There is, for instance, an account of the workhouses in Great Britain, written in 1732, and reprinted in 1786, in which the various occupations of the inmates, children and adults, are set forth. One of these appears to have been oakum picking, which the writer considered an ideally healthy pursuit. "They that pick oakum," he says, "are continually refreshed with the balsamick odour of it. The Spinners and Knitters with an exercise so moderate, that it fits any age or sex, at the same time that it qualifies those that are young for most handicrafts." Working hours were from six to six in summer and seven to five in winter, meal-times excepted. The children in the Shrewsbury House of Industry were set to work in the spinning-room soon after five years old, and they attended an evening school after working hours were over.

In the Bulchamp House "the children are at school from three to five years old; from that age, during their stay in the house, they are at the allotted hours in the workroom; these are busy scenes of cheerful industry, whilst content smiles on every little countenance... it gives one pleasure to observe that there is scarcely a child more than eleven in any of the houses; the directors and guardians making it a point to provide them with services as soon as the abilities of the child permit; the neighbouring farmers willingly accept them." A good deal more might be quoted in the same laudatory strain. This sentimental view of children's work is very characteristic of the eighteenth century. In the woollen industry

¹ T. Wood's "Account of the Shrewsbury House of Industry," 1795.

² Robert Potter's "Observations on the Poor Laws," 1775.

children at an age which we count almost as infancy were constantly employed at home with their parents, and this filled Defoe and other writers with something like a transport of admiration. A district or an industry in which "scarce anything of five years old" but could and did earn its living by the labour of its hands seemed to them an almost ideal state of society. To understand an attitude of mind so foreign to our own we have to recollect that the problem of pauperism had been for centuries of alarming proportions. The "valiant beggar" of Henry VIII.'s time, the destitute poor of Elizabeth and the Stuarts, had become a sort of nightmare. This appears in Sir Matthew Hale's "Discourse touching Provision for the Poor," 1683. "Poor Families," he says, "which daily multiply in the kingdom for want of a due order for their Imployment in an honest course of life, whereby they may gain subsistence for them and their children, do unavoidably bring up their children either in a Trade of Begging or Stealing, or such other Idle course, which again they propagate to their children, and so there is a successive multiplication of hurtful or at least unprofitable people, neither capable of Discipline nor beneficial Imployment." The economic side is more crudely stated by Sir William Petty.1 "About a quarter of the mass of mankind are Children, males and females, under seven years old, from whom little labour is to be expected. . . . The Author of 'The State of England' says that the Children of Norwich, between 6 and 16 years old, do earn f12,000 per ann. more than they spend. Now, forasmuch as the People of Norwich are a three-hundredth part of all the People of England, as appears by the Accompts of the Hearth Money, and about a fivehundredth part of all the King's subjects throughout the World, it follows that all his Majestie's Subjects between 6 and 16 years old might earn 5 millions per ann. more than

^{1 &}quot;Political Arithmetick," p. 105.

they spend." Unfortunately the reverse of the medal, the economic and social evils that follow from childlabour were not recognised till well on in the eighteenth century. Whether children were really worked harder in the early factories than under the domestic system it is not easy to say. Robert Owen and the philanthropists of his time certainly thought that the working hours had been much increased; but the elder Cooke Taylor, in his "Notes of a Tour in the Manufacturing Districts," describes conversations with more than one aged weaver, who considered that the state of children had often been worse under the old system than since the introduction of machinery. "The creatures were set to work as soon as they could crawl, and their parents were the hardest of task masters." In the framework knitting trade working hours were said to be from 5 or 6 a.m. till 10 at night, and large numbers of women and children were thus employed.2 Adam Smith remarks: "A shepherd has much leisure, a husbandman some, a manufacturer none at all,"3 the term manufacturer meaning at that time a hand-spinner or weaver, who was generally in the habit of employing his children the same hours that he worked himself. But no materials exist for anything like a statistical or accurate study of child-labour in the eighteenth century; we have

The author of an "Essay on Trade," 1770, advocated sending all children brought up at the public expense at four years old to the county workhouses, where they should "be taught to read two hours a day, and be kept fully employed the rest of their time, in any of the manufactures of the house which best suits their age, strength and capacity"! "being constantly employed at least twelve hours in a day... we hope the rising generation will be so habituated to constant employment, that it would at length prove agreeable, and entertaining to them. agreeable and entertaining to them . . . from children thus trained up to constant labour we may venture to hope the lowering of its price." See also the "Report of the Board of Trade to the Lords Justices in the year 1697, respecting the relief and employment of the Poor, drawn up by Mr. John Locke."

2 "Com. Journ." 1778, XXXVI. p. 740.

1 "Wealth of Nations," Book V., Chap. I., Part I.

to be content with literary and more or less biassed information.1 It is, however, evident that before the industrial revolution very young children were largely employed both in their own homes and as apprentices under the poor law, and it appears that long before Peel's time there were misgivings about the apprenticeship system. The writer of 1732, already quoted, advocated training and employing children in various ways, within the workhouse, until the girls were twelve and the boys thirteen, and shortening the usual term of apprenticeship; by this means the children would be enabled to earn their living almost as soon as they entered service, and this, he goes on to say, will likewise "cure a very bad Practice in Parish officers, who, to save Expense, are apt to ruin children by putting them out as early as they can, to any sorry masters that will take them, without any concern for their Education or Welfare, on account of the little money that is given with them." Felkin 2 says that parishes would sometimes offer £5 with each apprentice taken off their hands. William Bailey 8 mentions the illusage and neglect of parish apprentices by their masters. "Few of these poor children now serve out their time, and many of them are driven by neglect or cruelty into such Immoralities as too frequently render them the Objects of publick justice." The subject is bound up with that of poor-law children generally, into which we cannot of course go in detail. The condition of pauper children on the whole appears to have been bad, though there no doubt were exceptions, such as the Shrewsbury House of Industry, where the management was probably genuinely humane and careful. The celebrated philanthropist, Jonas Hanway, constituted himself the champion

¹ See Macaulay's "History," Chap. III., and Marx's "Capital," English translation, p. 258, for opposing views on the question. It is doubtful whether either of these great writers has proved his case, though each has stated it with force and brilliancy.

2 "History of Machine-made Hosiery and Lace," p. 75.

3 "Treatise on the Employment of the Poor in Workhouses," 1758.

of workhouse children much as Lord Shaftesbury, later on, took up the cause of the factory children, and his works are not much pleasanter reading than the reports on children's employment in the nineteenth century. The great object of the parishes seems to have been to get rid of the children, and those who survived the process of being put out to nurse (not a large proportion, apparently) were apprenticed anyhow or anywhere. In 1767 a committee of the House of Commons collected some truly appalling figures as to mortality among the parish infant poor; and an Act was passed requiring 2s. 6d. to be paid weekly for the care of each child, and Ios. to be given to any nurse who was so public-spirited as to keep a parish baby alive during one year.

All this, however, concerned pauper children as such, not factory children. It is not until the latter part of the eighteenth century that we find public attention being drawn to the state of working children, and then only by that most effectual of reminders, an infectious fever. This broke out in the cotton works at Radcliffe in the year 1784.2 A representation was made by some influential personages of the neighbourhood to the justices of the peace for the county of Lancaster, who in their turn requested some of the Manchester medical men to investigate the matter. Dr. Percival,3 who later on helped Peel

² There is an account of this epidemic in the Manchester Library, which we have not seen, and another in Clerke's "Thoughts on

Preserving the Health of the Poor," 1790.

¹ See, e.g., "The Importance of the Rising Generation," and other works, by Jonas Hanway (1767).

³ Thomas Percival, M.D. (1740—1804), practised as a physician at Warrington and Manchester, and was instrumental in founding the Manchester Literary and Philosophical Society and the Manchester Board of Health. His published works included "A Father's Instructions," a book for children which achieved great popularity, published in three parts, between 1775 and 1800; "Medical Ethics," 1803; and "Proposals for establishing more accurate and comprehensive Bills of Mortality in Manchester." He was keenly interested n social reform, and was the friend of many of the most distinguished men and women of the time.

with his advice and recommendations, was already a pioneer of progress in sanitation and public health in Manchester. He and his friends went into the matter without delay, themselves inspected the infected place, and drew up a series of recommendations, of which several were merely the ordinary precautions against contagion, or what were then considered to be such. The interesting part of the document is that in which these humane and keen-sighted men went straight to the root of the matter and designated the overwork of children as one of the principal evils of the factory system. How the fever had originated, they had been unable to ascertain. "But though this point remains doubtful, we are decided in our opinion that the disorder has been supported, diffused and aggravated, by the ready communication of contagion to numbers crowded together; by the accession to its virulence from putrid effluvia, and by the injury done to young persons through confinement and too long-continued labour: to which several evils the cotton mills have given occasion." The wording of the following recommendation is remarkable. "We earnestly recommend a longer recess from labour at noon and a more early dismission from it in the evening, to all those who work in the cotton mills; but we deem this indulgence essential to the present health and future capacity for labour, for those who are under the age of fourteen; for the active recreations of childhood and youth are necessary to the growth, the vigour and the right conformation of the human body. And we cannot excuse ourselves, on the present occasion, from suggesting to you, who are the guardians of the public weal, this further very important consideration, that the rising generation should not be debarred from all opportunities of instruction at the only season of life in which they can be properly improved." The magistrates of the county were so much impressed by the recommendations of the physicians that they directed their clerk to return them public thanks and to have the letter printed and

distributed; they also passed a resolution (which was reprinted in the Report on Parish Apprentices about thirty years later) that in future they would refuse to allow "indentures of Parish Apprentices whereby they shall be bound to owners of cotton mills and other works in which children are obliged to work in the night or more than ten hours in the day." This resolution of the Manchester magistrates in 1784 appears to be the earliest attempt of any public body to limit the hours of children's labour; it was, however, in form merely a novel kind of administrative regulation under the poor law and had no bearing on the question of the restriction of child-labour generally. Whether this action of the Manchester magistrates was an isolated effort, or whether corresponding attempts were made by other magistrates in the same direction, only a detailed examination of their records could tell us. In 1793 an Act was passed authorising justices of the peace to inflict a fine of 40s. on masters or mistresses convicted of ill-using an apprentice; it would be interesting to know whether this was ever put in force. It certainly appears that the evil continued to grow and increase; other epidemics occurred, and in 1795 Dr. Percival and his associates again met, and formed themselves into the "Manchester Board of Health." This time they advised legislation to regulate the hours and conditions of work in The resolutions in which this advice was embodied have been reprinted in the Report of Peel's Committee in 18161 and in nearly every subsequent work on the subject, but they are so important that we must quote them here in full.

Resolutions for the consideration of the Manchester Board of Health, by Dr. Percival, January 25th, 1796:—

"It has already been stated that the objects of the present institution are to prevent the generation of diseases; to obviate the spreading of them by contagion, and to shorten the duration of those which exist, by

¹ H. C., 1816, III., p. 377.

affording the necessary aids and comforts to the sick. In the prosecution of this interesting undertaking, the Board have had their attention particularly directed to the large cotton factories established in the town and neighbourhood of Manchester; and they feel it a duty incumbent on them to lay before the public the result of their inquiries:

"I. It appears that the children and others who work in the large cotton factories, are peculiarly disposed to be affected by the contagion of fever, and that when such infection is received, it is rapidly propagated, not only amongst those who are crowded together in the same apartments, but in the families and neighbourhoods to

which they belong.

"2. The large factories are generally injurious to the constitution of those employed in them, even where no particular diseases prevail, from the close confinement which is enjoined, from the debilitating effects of hot or impure air, and from the want of the active exercises which nature points out as essential in childhood and youth to invigorate the system, and to fit our species for the employments and for the duties of manhood.

"3. The untimely labour of the night, and the protracted labour of the day, with respect to children, not only tends to diminish future expectations as to the general sum of life and industry, by impairing the strength and destroying the vital stamina of the rising generation, but it too often gives encouragement to idleness, extravagance and profligacy in the parents, who, contrary to the order of nature, subsist by the oppression of their

offspring.

"4. It appears that the children employed in factories are generally debarred from all opportunities of education, and from moral or religious instruction.

"5. From the excellent regulations which subsist in several cotton factories, it appears that many of these evils may be in a considerable degree obviated; we are

therefore warranted by experience, and are assured we shall have the support of the liberal proprietors of these factories in proposing an application for parliamentary aid (if other methods appear not likely to effect the purpose) to establish a general system of laws for the wise, humane and equal government of all such works."

There had not yet occurred any great movement of popular sympathy on behalf of the children, but thoughtful persons here and there were studying the matter. This was the time of the eighteenth century awakening, of which Mr. Leslie Stephens gives so vivid an account in his volume on Bentham.1 Societies were being formed in various provincial towns for scientific discussion and investigation, there was a growing interest not only in natural science but in social science, humanitarianism, economics, health, and so on. The state of the factory children attracted the attention of philanthropists. Eden 2 notes the overcrowding and unhealthy conditions under which children were employed in the Liverpool and Manchester workhouses, sometimes seventy or eighty in a room, and that in the latter town a malignant fever was raging at the time of writing. The educational movement also gave an impulse in the direction of factory reform. William Sabatier³ notes that children employed in manufactures were usually only temporarily required and afterwards sent back to seek another mode of living. "As this discharge is about the age of fourteen, provided in the interim they were taught to read and write, which with their cloaths and food is the least which can be required of their employers, every encouragement should be given to this new method of promoting our manufactures.

"It is one of those plans which, if well regulated, would form the chief happiness of the poor; but if neglected

 [&]quot;English Utilitarians," Vol. I.
 "State of the Poor," 1797.
 Treatise on Poverty," 1797.

and left solely to the discretion of interested individuals, avarice, that bane of human happiness will look with callous indifference to every present and future misery in others." (In a footnote) "Nothing less than an Act of Parliament can put this most essential affair universally upon a proper footing, many particulars are necessary to be provided for—

"1st. The wholesomeness of the buildings in which they

work and sleep.

"2nd. Their cloathing, food and cleanliness.

"3rd. Hours of relaxation and sleep.

"4th. Medical assistance.

"5th. Teaching reading, writing and arithmetic.

"Unless these things are attended to, such manufactures will prove the destruction of the people. The want of the four first will ruin their health and impede their growth; the deficiency of the last will fix a considerable bar to their future advancement." T. Gisborne, the author of an "Enquiry into the Duties of Man," published in 1794, was well acquainted with the evils of employment in cotton mills, overcrowding, infectious fevers, night work, &c., and remarked "As interested minds will always feel strong temptations to this practice," i.e., employing children at night, "the case seems to call loudly for the interference of the Legislature." He also points out (p. 292) that "in the case of particular trades and manufactures which under common management prove injurious to the health and morals of the persons employed in them, justices of the peace may sometimes do great service to the community by strongly recommending the adoption of proper rules and precautions, even when the law does not give them the power of enforcing it."

It is worth noticing, in contrast to the excited speeches and overcharged style which characterised the Ten Hours' agitation later on, that this early factory reform movement was eminently a "common-sense" one, and that the tone of the reformers was sober almost to naïveté.

Thus Dr. Ferriar, who was associated with Dr. Percival, writes on the practice of working children all night, that "the continuance of such a practice cannot be consistent with health," and he is "glad to find it does not prevail universally!" Instead of an emotional appeal to humanity, he points out the risk incurred by the better classes from the fevers generated by the dirt and misery of the factory population, and says with perfect truth and perhaps a touch of cynicism, that the "safety of the rich is intimately connected with the welfare of the poor."

It may also be noted here that both Ferriar and Percival advocated stringent inspection and control both of factories and dwelling-houses as a necessary means for checking the ruinous waste of life and energy, through disease, that they saw going on.² It does not appear that they took this line from any conscious reaction against liberalism and laissezfaire towards paternal government; rather it would seem that the conclusion forced itself upon them from the study of facts and from their knowledge of the conditions of life then prevailing among industrial workers.

The evils and horrors of the industrial revolution are often vaguely ascribed to the "transition stage" brought about by the development of machinery and the consequent "upheaval." But the more we look into the matter, the more convinced we become that the factory system and machinery merely took what they found, and that the lines on which the industrial revolution actually worked itself out cannot be explained by the progress of material civilisation alone; rather, the disregard of child-life, the greed of child-labour, and the mal-administration of the poor law had, during the eighteenth century, and probably much further back still, been preparing the human material that was to be so mercilessly exploited.

^{1 &}quot;Ferriar's Medical Histories and Reflections," Vol. I., pp. 261, 289.

² See "Ferriar's Medical Histories and Reflections;" also "Percival's Works," Vol. I., p. 257, note (g).

CHAPTER II.

THE EARLY FACTORY ACTS, 1802-1819.

Cruelty to Apprentices—The Act of 1802—Robert Owen—The Effect of Shorter Hours-The Ten Hours' Bill-Its Rejection-The Act of 1819-Views and Opinions.

WE cannot tell whether the resolutions of the Manchester Board of Health had much result in increasing the vigilance of the justices over the children apprenticed in their jurisdiction. It is mentioned, however, in the Report of Peel's Committee 1 that there began to be an aversion to apprentice children to cotton mills and the Birmingham justices in particular determined not to do so.2 Nor were cotton mills the only offenders, probably not even the chief ones. In 1801, a man named Jouvaux was tried for ill-treating and overworking his apprentices and was sentenced to twelve months hard labour by Mr. Justice Grose. From the report of this trial,3 it appeared that though the defendant was in destitute circumstances and quite unable to carry on a business properly, the criminal carelessness of the poor law overseers had enabled him to secure the premiums and services of no less than sixteen apprentices, whom he employed in tambour work. It was stated that these sixteen unhappy children had but two beds amongst them, and were kept at work for such hours, and, owing to the nature of the work, in such attitudes that they came near being deformed and disabled for life. The master was found guilty of "assaulting and cruelly beating Susannah

3 Lancashire Gazetteer, July 4th, 1801.

¹ H. C., 1816, III. ² Sir Samuel Romilly says in his Diary (Vol. II., p. 374) that he has known cases where the apprentices were murdered by their masters in order to get fresh premiums with new apprentices.

Archer, a child of fifteen years, his apprentice; of employing her to work in his business . . . beyond her strength, at unreasonable hours and times; of neglecting to provide for her proper clothing and necessaries, whereby she was stated to be emaciated and her health impaired." The overseers of the parish and the magistrates who signed the indentures of apprenticeship were severely censured by the judge for neglecting "to inquire and learn how these children were employed, how they were clothed and fed, and whether the employment were suited to their years and conditions." And the judge went on: "Should the manufacturers insist, that without these children they could not advantageously follow their trade, and the overseers say that without such opportunity they could not get rid of these children, he should say to the one, that trade must not for the thirst of lucre be followed, but at once, for the sake of society, be abandoned; and to the other, it is a crime to put out these children, who have no friend to see justice done, to incur deformity and promote consumption or other disease; this obviously leads to their destruction—not to their support." There are several noteworthy points in this interesting trial. The industry was one that had not probably been much if at all influenced by new machinery. Yet we find the apprentice trouble present in its acutest form. The supply of cheap labour offered by the apprenticeship of pauper children acted, as we see by this case, as a temptation to poor and ignorant persons to set up some business which they were incompetent to carry on and could not have started if they had had to pay fair wages and give their workers reasonable conditions.1 The judge's opinion that an industry carried on in the manner described could be of no benefit to society, but rather the reverse, may be noted as distinctly "advanced." The prevailing tendency was to regard industries as wholly productive and to omit any

¹ See also Hansard, December 9th, 1819, col. 908.

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reference to their effect on the health and strength of the community.

It was no doubt in consequence of these and other revelations that Sir Robert Peel, in 1802, brought in a Bill known as the "Health and Morals of Apprentices Act, 1802," which passed with little or no opposition. 1 Its chief provisions may be thus summarised: The working hours of apprentices were limited to twelve a day. Night work (by apprentices) was to be gradually discontinued, and to cease entirely by June, 1804. Apprentices were to be instructed in reading, writing and arithmetic, and a suit of clothing was to be given yearly to each apprentice. Factories were to be whitewashed twice a year, and at all times properly ventilated; separate sleeping apartments were to be provided for apprentices of different sexes, and not more than two were to share a bed. Apprentices were to attend church at least once a month. To secure the proper administration of the Act, the justices were to appoint two inspectors from among themselves, of whom one should be a clergyman, to visit the factories. All mills and factories were to be registered annually with the clerk of the peace. The justices had power to inflict fines of from £2 to £5 for neglect to observe the above regulations.

Peel said later on that he had no difficulty in getting this Bill passed, the House being quite convinced of its necessity, and it does not appear that the Act was received in at all a controversial spirit. It was in reality not a Factory Act properly speaking, but merely an extension of the Elizabethan Poor Law relating to parish apprentices. The Government, having taken upon itself the responsibility of bringing up and placing out these children, found itself compelled, when need was shown, to attempt to regulate their conditions of work. Peel rather naïvely gave as a reason for bringing in the Bill that he was convinced of the existence of gross mismanagement in his

own factories, and having no time to set them in order himself, got an Act of Parliament passed to do it for him. The question was just raised whether the Act should be made applicable to all factories, or only to those where apprentices were employed. In the preamble the Act was made applicable not only to apprentices, but to all cotton and woollen factories in which "twenty or more persons" were employed, but the clause relating to restriction of hours, as well as, of course, those for education, &c., were expressly applied to apprentices only. whitewashing and ventilation clauses applied, therefore, to all factories. It is certain that there were some who would have made the Act more comprehensive, but it seems to have been hampered, so to speak, by its education clause. In the House of Commons. Mr. Newton suggested extending the provisions of the Bill to "all manufactories and the persons employed in them," but this was opposed on the ground that it would be absurd to extend a Bill "which related merely to the education of apprentices," "to persons employed in free labour, and who were not subject to the control of their employers perhaps for more than a week." This objection seems like saying that the operation of an Act cannot be extended beyond a certain point because it is to be limited within that point, and it shows that the Act was regarded exclusively as a bit of poor law regulation. The Act in itself was utterly ineffective, both by reason of what it left undone and of what it tried to do. The restriction of hours, for instance, was quite inadequate. Nevertheless, there were good points in it. It was something to get any limitation of hours adopted as a principle by the Legislature, and it is remarkable that, as the Act made no exceptions for age or sex, the limitation applied equally to those apprentices who were grown-up young men and women, and imposed an uniform rule for all. The reliance for inspection on the justices of the peace

¹ Hansard, May 8th, 1802.

has generally been assumed to be the chief cause of the failure of the Act, as the justices were either lax or entirely negligent in its administration. Yet it appears from certain reports that some of them, at least, did their duty, visited the factories, and endeavoured, according to their lights, to control bad conditions where such existed. They soon found, however, that the growing practice was to employ so-called "free" children in preference to apprentices, and in such cases they had no authority. They were also, it must be owned, amateurish in their methods, e.g., one of them mentions in his report that he found sixteen apprentices sharing a bedroom which in his opinion would only have accommodated eight; but he does not state, or, indeed, appear to have taken any measurement of the apartment. Any action of this sort was optional on the part of the justices; they could do as much or as little as they liked, and there is evidence that in some districts the very existence of the Act was unknown. But however unsatisfactory they might be in the difficult and delicate task of inspection, it would be a great mistake to overlook the excellent work done by justices in educating public opinion, at a time when such education was sorely needed. In 1803 the West Riding justices, in Quarter Sessions, at Pontefract passed some excellent resolutions, including one that children should not be allowed to be apprenticed to mills where they would be liable to work at night or more than ten hours by day; this was a considerable advance on the Act.

It soon became evident, however, that the question of parish apprentices had ceased to be important. It was not that they ceased to be employed, but they were not the predominant factor in the problem that they had been, or had seemed to be.² As Peel explained in 1815, the adoption of steam-power made great changes. The first steam-engine

¹ Lords' Sessional Papers, 1819, XIII. ² See Report of Peel's Committee, p. 479.

on Watt's pattern had been introduced at Manchester in 1791, but it did not come into general use till the early years of the nineteenth century. With the restoration of peace in Europe an immense development of the industry took place. The English manufacturers had been improving their processes, they were now able to send their goods to foreign ports, and proximity to coal, labour, and the world-markets came to be a more important consideration than water-power, though this was still used, sometimes as an alternative to steam, sometimes independently. Pauper children had been eagerly demanded by manufacturers whose mills were situate in lonely valleys, where, if water power were cheap, yet labour was scarce; but in the populous centres child-workers could easily be had without the trouble and responsibility of taking apprentices who must be housed, fed and clothed at the employer's expense.

The whole subject now assumes a somewhat different aspect. The factories for the most part were much larger affairs, and much more before the eye of the public. The first factory-owners had been men of no educationoperatives who had risen-narrow minded, keenly conscious of the difficulty of trading on small capital, and quick to seize any advantage offered by specially cheap or subsidised labour. Twenty years later the class was better educated, if not by schools, at least by their wider life; not likely, perhaps, to fall into the revolting personal cruelties to be read of in Robert Blincoe's memoirs as occurring in the smaller old-fashioned factories, but still hard, grasping and covetous, and entirely convinced that national prosperity and their profits must rise and fall together. Also from this time forward the regulation of factories by the State becomes a highly controversial question. The employers might be known in some quarters as "the Ogres," but, on the other hand, they

¹ See Sir James Mackintosh's Diary and Memoirs, under date April 27th, 1818.

had become articulate, they could state their case and express their views in a more or less literary form, or at all events get some one else to do it for them.1 Side by side with this new industry, the cotton-spinning on a large scale, there still went on the old hand-loom weaving in cottages and cellars; and for this, according to Kinder Wood's evidence, given before Peel's Committee,2 the children were still sent down from London and apprenticed to the weavers. The Apprentices Act, applying only to mills and factories, had no control here; and the hours worked might be anything the master liked, from none at all on Monday perhaps to fifteen or sixteen on Friday and Saturday.3 Kinder Wood said that such manufacturers employed their own children also, and that when the father was drunk, the mother kept the children to their weaving: "The children support the father, contrary to the common use of nature." This kind of evidence occurs again and again before Peel's Committee. Samuel Stocks said he knew of no factories so damp or unventilated as the weavers' cellars (p. 493). Houldsworth, another witness, speaks of the improvement in the spinners' condition since 1795 and the introduction of steam. Before that date the spinners, working their machinery by hand, could indulge in irregular habits, drink the first days of the week, and work excessive hours the rest, and compel the "piecer" or young attendant to do the same. In these facts one is compelled to recognise that the factory owners, from their own point of view, had a distinct grievance in being selected by the Government as a subject for experimental regulation. Conditions in cotton factories, considered by themselves, were not

² See Report, p. 442.

¹ See, e.g., "An Enquiry into the Principle and Tendency of the Bill for imposing certain restrictions on Cotton Factories." London, 1818.

³ The evidence about hand industries may appear to be somewhat biassed; but it is independently confirmed by the report of the tambour worker's trial quoted above.

good, but relatively to conditions in other industries they probably had some advantages. The factories stood more in the light of day, and the evils connected with them attracted more attention than the older handicrafts, where evils no less serious existed in a deepseated and elusive form, and have proved more difficult to eradicate.

Socially and industrially the first two or three decades of the nineteenth century form a gloomy period, in which, as Spencer Walpole¹ observes, it took twenty-five years of legislation to restrict a child of nine to a sixty-nine hours week, and that only in cotton mills. Almost the only episode pleasant to dwell upon or giving much hope of future progress is the work of Robert Owen. Instead of requiring an Act of Parliament to regulate his own factory, like Sir Robert Peel, Owen offered the arrangements and rules of his mill as a precedent for universal application. He tried various experiments in reducing child-labour and hours of work, the results of which he gave in his evidence before Peel's Committee. He stated that he employed no children under ten, and the total hours worked were twelve, including one-and-a-quarter off for meals. He had previously worked fourteen, but made the reduction gradually. He desired to make a further reduction of hours, and did not think that manufacturers would suffer by so doing either in their home or foreign trade. He believed that such a limitation of hours would result in a "considerable improvement in the health of the operatives, both young and old, a very considerable improvement in the instruction of the rising generation, and a very considerable diminution in the poor rates of the country." A great improvement "in the general health and spirits" of the people employed by him had resulted from the changes already introduced; he did not think it "necessary for children to be employed under ten years of age in any regular work;" he thought instruction and education

^{1 &}quot;History of England," Vol. III., p. 203.

were enough. When he was asked, "Would there not be a danger of their acquiring vicious habits for want of regular occupation?" he replied, "My own experience leads me to say that I have found quite the reverse, that their habits have been good in proportion to the extent of their instruction," and he thought children from ten to twelve might be employed as half-timers only.

Nor did he believe that the parents would suffer from not being allowed to employ children so many hours, as in his experience, when children were not employed at an early age, the families were generally in a more comfortable and respectable situation in life than the families whose children were so employed. As to the result to the masters of shortening hours, his experiment had taught him that it was "much less unfavourable than could be supposed." "I find by actual practice . . . that the difference to the proprietors, taking every circumstance in the most unfavourable way in which they can be taken, will not be more than $\frac{1}{4}d$. per yard upon the goods manufactured from the varn spun at that manufactory; and I have every reason to believe, from the progressive increase in the quantity which has taken place regularly every month since this change took place, that before the end of the year the varn will be manufactured as cheap, working 103 hours per day, as ever we manufactured it working 1134 hours per day. The present loss is not more than $\frac{1}{4}d$. in is. 8d.," and in his opinion the loss would soon be made good by the increased strength, activity and improved spirits of the individual workers, as a consequence of being employed a shorter time. Being pressed by a member of the committee who was incredulous that these conditions could, as alleged, have any influence on the output of machinery, Robert Owen explained further, "A larger quantity may be produced by a greater attention of the hands while the machinery is at work, in preventing breakage, and by not losing any time in commencing in the morning, at meals, or when stopping at night; from the greater desire of the individuals to perform their duty conscientiously; from the great wish to make up for any supposed or probable loss that the proprietors might sustain in consequence of giving this amelioration to their work-people; such conduct to work-people is the most likely to make them conscientious, and to obtain more from them than when they are forced to do their duty." It is unfortunate that Nassau Senior, when writing his "Letters on the Factory Acts" twenty years later, did not make himself acquainted with the practical experience related in Owen's evidence.

Having accumulated this experience in what might be called the humane or social economy of manufactures, Owen called a meeting at Glasgow of the local textile manufacturers for two purposes. One purpose was to petition that the cotton duties, which were burdensome to the trade, should be taken off; this was received with acclamation. The other was to bring before the Government the state of the people employed in textiles, with a view to shortening their hours of labour, and generally improving their conditions. If Owen supposed that by artfully combining the two proposals he could gild the pill and cause it to be swallowed by his brother manufacturers, he was doomed to disappointment; they entirely rejected his second resolution. Seeing that he could get no support from them, he went to London, and approached some members of the Government on the subject. He writes thus in his autobiography1: "The Government was favourable to my views for the relief of children and others employed in the growing manufactures of the kingdom, if I could induce the members of both Houses to pass a Bill for the purpose." He waited on some leading members, and was generally well received. Peel gave some sympathy and encouragement, but was very dilatory in action, and an opposition party was given time to grow up. "The first plea of the objectors to my Bill was that masters

¹ Page 115.

ought not to be interfered with by the Legislature in any way in the management of their business. After long useless discussion, kept up to prolong time, this was at length over-ruled. The next attempt was to prove that it was not injurious to employ these young children fourteen or fifteen hours a day in over-heated close rooms, filled often with the fine flying fibre of the material used, particularly in cotton and flax spinning mills. Sir R. Peel most unwisely consented to a committee being appointed to investigate this question, and this committee was continued for two sessions of Parliament before these wise and honest men, legislating for the nation, could decide that such practices were detrimental to the health of these infants."

The Act eventually passed in 18191 was very much watered down from Owen's draft. His Bill would have prohibited children working under ten, and would have safeguarded this by requiring evidence of age from the baptismal register or otherwise. The Act merely fixed the age limit at nine years. Owen's Bill would have limited hours of work for all under eighteen to ten and a half a day, exclusive of meal-times; the Act forbade any person under sixteen to be employed more than twelve hours a day, exclusive of meal-times. Owen's Bill provided for the appointment of paid and qualified inspectors; the Act left the matter in the hands of the justices as before, although the system had been proved impracticable by sixteen years' experience. The Act also took account of cotton mills only, whereas Owen's Bill included all cotton. woollen, flax and other mills in which twenty or more persons shall be employed. The one really important provision of the Act remains the prohibition of child labour under nine. Owen wished to have raised the minimum to twelve years, but conceded that it should be ten, and it was further lowered to nine. This, niggardly as it was, was the affirmation of a principle which

¹ 59 Geo. III. c. 66.

was perhaps more needed at that time than any other. Many particulars on the subject can be gleaned from the Report of Peel's Committee. Owen said children were commonly employed at five or six, and instances were given him of some working at three and four years! George Gould said the spinning men and women were allowed to employ children of their own selecting, and if they could get a child to do their business for a shilling or one and six, "they would take that child before they would give three, four, five, six, or seven shillings to an older one." Thomas Wilkinson, a cotton spinner, who gave evidence before the Lords' Committee in 1819, and had been an overlooker, thought that about one half the number employed were under sixteen in the factories that he knew, and about one in five or six was under nine. Sir Robert Peel himself said before the Committee of 1815 that children of seven often worked thirteen or fourteen hours a day. Kinder Wood, a surgeon, being asked at what age children might safely be admitted to factories to work twelve hours a day, said he thought at ten years. It is rather melancholy to notice how low was the standard even of those witnesses who spoke in favour of restricting child labour. Thus Dr. Baillie thought thirteen hours' employment daily too much for any time of life, but was willing that children should be employed at seven years, and at ten should work ten hours. Sir Gilbert Blane thought employment of children under ten, if limited to five or six hours a day, might be "not pernicious but salutary," and on being asked if any restriction could make it proper to employ children under six, cautiously replied that he was so little acquainted with the nature of occupations in manufactures that he could not answer the question. Again and again we find the fixed idea that it was cruel to prevent or restrict children's labour, because they "must starve" without it. The promoters of Factory Bills would be told that they were legislating on the choice between too much work and too little to eat.

Mr. Price, however, a magistrate examined before Peel's Committee, pointed out that the system had other bearings, less obvious but more real than this neat antithesis. "If parents were thrown more upon themselves and did not draw a profit from children in their very early years, they might not waste so much of their own time, they would work harder, and probably obtain better wages for better work." Asked if it were not advantageous to the lower orders to have their children employed, he replied cautiously, "It certainly appears to be so, it appears that more money is got; but if the practice were done away as regards the youngest children, I think it would not be so much felt as is supposed." It is rare at this period to find any one distinctly holding the idea that employing children so largely might tend to depress wages. George Gould, however, probably realised it, for he noted the lowness of wages earned by adult "manufacturers," as he calls them, in connection with his evidence as to the very young children employed. The prohibition of children working under nine in the Act of 1819, was therefore valuable as setting up a standard, though as a regulation it was highly inadequate. It did not even go so far as the practice of the best manufacturers, for not Owen alone, but also Arkwright, deposed that he took no children under ten.

Some of the medical evidence given before the Lords' Committee suggests that at least one or two of the doctors summoned were literally suborned by the masters, so extraordinary were their shifts and evasions to escape answering the questions put to them.¹ That it should have been thought necessary to call expert medical evidence at all, is in itself an indication of the reluctance of the manufacturing interest to agree to even the most elementary measure of reform. Having once established beyond a doubt that fourteen or fifteen hours a day were constantly worked by quite young children, it argues a certain degree

¹ See Lords' Sessional Papers, 1818, IX., p. 150.

of naïveté, whether real or assumed, to call a doctor to say whether it were bad or good for their health.

It is not easy to summarise the contents of a report like that of Peel's Committee, so much of the evidence being obviously biassed, and some of it being given by people who, although impartial and humane, were by their own confession not much acquainted with the industry. But there are two points which may be noticed. One of these is the evolution of the factory. Besides the two contrasted types of industry, the weavers working in their miserable homes, and the new factory, such as that of Arkwright, with its relatively moderate hours and good sanitary conditions, we find also the makeshift factory, composed of two or more cottages joined together, with a steam engine attached, the premises low, overcrowded with machinery, and unprovided with proper ventilation for carrying off cotton-flue and dust. These makeshift factories were much more unhealthy and unsatisfactory than the factories proper. The other point to be noticed is the view that appears to have been held about industrial regulation. We discover at this period scarcely any signs of the argument used by the modern enlightened individualist Liberal, that it is unfair to deprive the worker of the right to work as long as he likes, to penalise the industrious for the sake of the lazy, and so on. As Mr. Leslie Stephen remarks,2 the growing class of manufacturers were inclined to Liberal principles not so much from adhesion to any general doctrine, as because restrictions interfered with their own freedom. The arguments used to weaken the Act of 1819 are those that belong to the mercantilist order of ideas, and are based on the twofold assumption that (a) the protection and preservation of industry on its commercial side should be the object of the State, and (b) that the proposed regulation would injure trade and drive it out of the country, eventually reducing not only the capitalists, but also the workers to beggary.

¹ Page 435.

² "English Utilitarians," Vol. I., p. 65.

This appears to have been the most general line of attack. It is a view still widely held, though perhaps no longer with regard to restrictions on child labour. evidently this opinion Mr. Justice Grose was opposing 1 when he boldly declared that the industry had better go if it involved the slow destruction of the workers. We may note also the singular assumption that—not idleness but-leisure is the root of all evil, and that the people were entirely incapable of employing sensibly even an hour for themselves. This idea recurs over and over again, with reference not only to adults but even to children, who, it was urged, would take to bad courses if allowed any interval between work and sleep. Thus, the curious pamphlet already cited2 says, "All experience proves that in the lower orders the deterioration of morals increases with the quantity of unemployed time of which they have the command. Thus the Bill actually encourages vice-it establishes idleness by Act of Parliament; it creates and encourages those practices which it pretends to discourage." This line of argument evidently springs from a conception of the manual working, or so-called lower, classes, as being an order apart, almost an inferior race, without any claim on the humane or liberal side of life, who should be kept carefully to their one proper sphere, namely, hard manual work. A third argument we may distinguish in the year 1819, of a somewhat different and more respectable nature. It might be called the optimistic argument, and was partly based on Adam Smith's doctrine and destined to develop into what has been called "Manchesterism." Its contention was that things were not so bad as represented, that their inherent tendency was to right themselves if let alone, and that conditions were better on the whole in cotton factories than in other industries. In this last statement lay the strength of the position, for there seems good reason to think that in the larger and more fully developed steam

¹ See above, p. 15.

factories things were already improving, that a man like Arkwright's son was giving better conditions than the Act required, and infinitely better than those prevailing in the hand industries. But this was not in reality any argument against regulation by law, for the evidence shows that there were other masters, less secure in position than Arkwright, who would gladly have worked shorter hours, and were prevented from doing so by the competition of their neighbours. It can hardly be necessary nowadays to say that to take an absolutely optimistic view of the cotton industry at that time was the outcome either of blind prejudice or of complete ignorance; the whole facts were against such a view.

On the other side we find the view that the so-called industrial revolution came as a sudden disaster on the workers, and brought with it all these terrible conditions of over-work and long hours as something new, as a thunderbolt falling on an eighteenth century of peaceful industry and domestic happiness. This view seems to have been largely held by those, who, like Owen, initiated the work of reform. and in so far it is entitled to all respect. It may, however, be doubted whether it bears comparison with facts much better than do the others. The true line of reform was to look to the future, not to the past; to utilise the possibilities of increased production and centralised control so as to prevent the exploitation of the workers; not to hark back to industrial conditions which were certainly outgrown, and probably had never been so fair as they were painted.1

¹ It is interesting to note that Samuel Taylor Coleridge was one of those who took an interest in the factory children at this period. In Crabb Robinson's "Diary," Vol. II., pp. 93—95, we find the poet writing to the lawyer to know "if there is not some law prohibiting, or limiting, or regulating the employment either of children or adults or both, in the white lead manufactory? . . . Can you furnish us with any other instances in which the Legislature has directly or by immediate consequence, interfered with what is ironically called 'Free Labour'? (i.e., DARED to prohibit soul murder and infanticide on the part of the rich, and self-slaughter on that of the poor!)" The letter also alludes to circulars drawn up by S. T. C. in favour of Sir Robert Peel's Bill. It would be interesting to know if any of these circulars are in existence.

CHAPTER III.

THE APPOINTMENT OF GOVERNMENT INSPECTORS.

Hours of Labour—The Acts of 1825 and 1831—The Difficulty of Administration—Inspection recommended by the Commission of 1833—The Act of 1833.

THE Act of 1819 was quickly followed by a short amending Act, 60 Geo. III., c. 5, permitting time lost by water failure or other accident to be made up by working overtime or in the night. It also relaxed the meal-time rule, permitting the dinner hour to be any time between eleven and four, instead of between eleven and two, and

was, on the whole, of a retrograde tendency.

In 1825 an amending Bill was brought in by Sir John Cam Hobhouse, which became law the same year. may perhaps have been owing to the discussion aroused by this Bill that an anonymous investigator published a pamphlet of six or seven pages, called "Hours of Labour, Meal-times, &c., in Manchester and its Neighbourhood," London, 1825. Apart from the information it contains, this little compilation is interesting as being probably one of the earliest attempts to exhibit material of this kind in a systematic manner. It states that in Manchester the customary working day extended over fourteen hours. The greater number of mills allowed half an hour for breakfast, and either fifty minutes or an hour for dinner. "There are others, however, which allow no time for breakfast. In this place also the men seem for the most part to be dismissed on Saturdays about 4 o'clock p.m. Common hours here are from 6 a.m. until 8 p.m." Some mills worked from 5.30 a.m. to 7.30 or 8 p.m., and a few till 8.30 p.m. "Although meal-times are nominally allowed

(and the grown-up spinners are released), the children or piecers are detained three or four days in each week, during those meal-times, to clean the machinery; consequently they get no exercise nor change of air, and what is worse, are driven to the necessity of snatching by mouthfuls their food during the act of cleaning, whilst dust and cotton-flue are flying and falling thick around them. This remark applies generally throughout these districts, namely, that the children are thus detained three or four times in each week, during the breakfast and dinner hour, to clean the machinery." The writer gives similar details about Stockport, Ashton, and Burnley; at Stockport the hours seem to have been somewhat longer than at Manchester. At Oldham "common hours at this time (there has been an inspection here) are thirteen. No breakfast time generally allowed." At Lees, near Oldham, "common hours twelve-and-a-half (yet no inspection here)." The writer describes conditions at Ballington, Chorley, Preston, Colne, and Bradley. At the lastmentioned place one master is mentioned as working his mill both night and day. In conclusion, the writer states his opinion that the practice of detaining children during meal-times, as previously described-"in a foul atmosphere, and in a temperature equal to that of a hot-house" -is "by far the most prominent and mischievous of all the violations of the Act; and it is general. Even Manchester is not exempted from the charge; though matters are (for obvious reasons) better at Manchester than in most or any places beside."

The Act of 1825 prescribed that no person under sixteen was to work more than twelve hours a day, exclusive of an hour and a half for meal-times, thirteen and a half in all. This only reduced the average working day, as stated in the tract, by one half-hour. The dinner hour was to be between eleven and three instead of eleven and four as previously. On Saturdays only nine hours'

^{1 6} Geo. IV., c. 63.

work was allowed, between 5 a.m. and 4.30 p.m. Leaving work earlier on Saturdays was, as we have seen, already customary in many of the mills. No attempt was made in this Act to check the practice of setting the children to clean machinery or do other work during meal-times. Employers were pronounced free from responsibility as to employing children under the legal age if the parents or guardians of any child declared it to have attained that age. Justices who were themselves proprietors of mills, or the fathers or sons of such proprietors, were prohibited from hearing complaints under the Act. The period within which a complaint must be made was reduced from three to two months after the commission of the offence. In 1831 a further amending Act1 was passed. The period within which complaint must be made was further reduced to three weeks. On the other hand, not only the mill-owners, their fathers and sons, but also their brothers, were now excluded from sitting as justices to hear complaints, and if necessary, other justices of the county, or within a radius of twelve miles, were to be called upon. On proof given that the machinery of the accused had been working during the night, he might be summarily convicted, unless he could prove he had not employed persons below the specified age. This laving the burden of proof on the employer seems to have been done at the instance of the larger manufacturers who, under the pressure of public opinion, were themselves ready to introduce a twelve hours' day, and who desired to prevent their smaller neighbours from competing with them by working longer.3

The Acts of 1819 and 1825 had required an abstract or copy of the Act to be hung up in a conspicuous place in the factory. In 1831 this useful provision was omitted. and in its stead a register was to be kept, in which the employer noted down the actual duration of each working

 ^{1 &}amp; 2 Will. IV., c. 39.
 See Hansard, February 15th, 1831, col. 585.

day, and which he had to produce when required by the justices. The Act of 1831 also extended the twelve hours working day to all persons under eighteen, instead of sixteen, as before, and prohibited nightwork to all persons under twenty-one. As originally introduced the Bill was to have applied to all textile industries, but to this there was great opposition, and as finally passed, cotton mills only were included in its scope.

In September, 1830, Richard Oastler began his series of fiery letters to the Leeds Mercury on the subject of "Yorkshire Slavery." In 1831 Michael Sadler,2 recently elected to Parliament, introduced a Ten Hours Bill at the end of the year, and moved the second reading on the 16th of March, 1832, in a brilliant and able speech. He began by admitting legislative interference to be an evil; but so, he said, was all legislation, only to be tolerated for the purpose of preventing some greater evil. He went on to demolish in a few telling sentences the idea that labourers generally were "free agents." Unless the demand for labour equalled the supply, the employer and employed did not meet on equal terms in the market; on the contrary, the latter was often almost entirely at the mercy of the former; and if this were the case with adults, how much less could children be considered free? Sadler then described the excessive hours, the over-heated atmosphere. and, in some cases, the shocking cruelties which were the conditions of children's labour in too many of the mills,

¹ Richard Oastler (1789—1861), called the "factory king," was a Churchman, a Tory, and an advocate of the abolition of slavery in the West Indies; led the agitation for the Ten Hours Day from 1830 onwards; opposed the new Poor Law of 1835; was imprisoned for debt in 1840, and during his imprisonment, which lasted three years, published the "Fieet Papers," in which periodical he continually urged the need of factory reform.

Michael Thomas Sadler. Born 1780. Tory philanthropist and writer on political economy; became interested in the factory children, 1823; M.P. for Newark, 1829; introduced a Bill for restricting children's labour, December, 1831; chairman of Select Committee to enquire into the condition of children employed in manufactures, April, 1832; died 1835.

the impossibility of education, and the lack of time for play and exercise. Sadler's Bill was, however, strongly opposed by the manufacturing interest, and the subject was referred to a Select Committee, over which Sadler himself presided. The Report¹ of this Committee is one of the most valuable collections of evidence on industrial conditions that we possess. Sadler spared no pains to collect evidence from every part of the kingdom; and his toil and anxiety was a contributing cause of his comparatively early death. As his biographer remarks, "It is certain that the exertion shortened his days, but it is gratifying to reflect that the sacrifice was not made in vain."

In the autumn of 1832, Parliament was dissolved, and in the ensuing election Sadler lost his seat. The Rev. G. S. Bull, a devoted worker in the cause of the children, was deputed by the Short Time Committee to invite Lord Ashley2 to take Sadler's place. Lord Ashley's sympathies had already been awakened by the perusal of extracts from the evidence given before Sadler's Committee. He agreed to take up the task, though not without a struggle.3 In the words of his biographer: "He now stood at the parting of the ways. On the one hand lay ease, influence, promotion, and troops of friends; on the other an unpopular cause, increasing labour amidst every kind of opposition; perpetual worry and anxiety; estrangement of friends; annihilation of leisure; and a life among the poor. It was between these he had to choose."

Although the enquiry by the Select Committee had been urged by the manufacturers themselves, and their

¹ H. C., 1831—2, XIII.

² Anthony Ashley Cooper, Lord Ashley, afterwards Lord Shaftesbury. Born 1801. Entered Parliament, 1826; interested in the factory children, 1832; brought in a Ten Hours Bill, 1833; succeeded to earldom, 1851 (see Life by Edwin Hodder, 3 vols., 1886, for many and varied labours as social reformer); died 1885.

³ See Life, I., p. 147.

interests had been well represented upon it,1 they were discontented with the results, and now pressed for a fresh enquiry on the spot, to be made by Commissioners despatched from London for the purpose. This Commission was viewed with disfavour, both by the operatives and by their friends in Parliament, and was supposed to be chiefly composed of persons favourable to the manufacturing interest, and willing to accept the hospitality of the mill-owners. In spite of the bias with which they were credited, the Commissioners went to work with energy, and brought out their first report in about two months.2 To the general surprise it was distinctly in favour of legislation, though not entirely on the lines laid down by Sadler and Lord Ashley, whose Bill, the Commissioners thought, went too far in some directions and not far enough in others.3 The principal conclusions of this first report were that children were commonly employed in manufactures for as long a time per day as adults; that the result was in many cases physical deterioration and partial or total deprivation of education; that the children thus employed were not "free agents," and that a case was made out for the interference of the legislators, the existing law being "almost entirely inoperative."

The evidence given before Sadler's Committee had been generally favourable to the tendency of the Acts,⁴ but showed them—as did the Commissioners' Report—to be inadequate to resist the forces tending continually to lengthen the day's work. Dr. Thackrah Turner gives an interesting analysis of the process he saw at work.⁵

"The duration of labour is the opprobriousness rather of our manufacturing system than of individuals. The masters with whom I have conversed are men of humanity, and willing, I believe, to adopt any practical proposal to

See Sadler's Life, p. 382.
 H. C., 1833, XX., XXI.

H. C., 1833, XA., XXI.
 Hansard, June 17, 1833, col. 914.

⁴ See, e.g., answers to qu. 6,780, 9,378. ⁵ "Effect of Trades on Health," 1831, p. 46.

amend the health and improve the state of their workpeople. But they are scarcely conscious of the extent of the mischief. We underrate evils to which we are accustomed. The diminution of the intervals of work has been a gradual encroachment. Formerly an hour was allowed for dinner; but one great manufacturer, pressed by his engagements, wished his work-people to return five minutes earlier. This abridgment was promptly adopted at other mills. Five minutes led to ten. It was found also that breakfast and drinking (afternoon meal) might be taken while the people were at work. Time was thus saved; more work was done; and the manufactured article could be offered at a less price. If one house offered it at a lower rate, all other houses, to compete in the market, were obliged to use similar means. Thus what was at first partial and temporary has become general and permanent. And the unfortunate artizans, working before in excess, have now to carry labour to a still greater and more destructive extent . . . so established are the hours of work, that no individual master can, without loss, liberate his people at an earlier period. A legislative enactment is the only remedy for this."

Legislative enactment, however, was not enough. The question was, how was the law to be enforced? Supervision by the justices had not proved a success. expedient had been tried of assigning to the informer one half of the fine imposed, which was now raised to from fio to f20. The weak point of this plan was that, as outsiders had no right to enter the factories, information could only be given by the operatives themselves. Now, although £5 to £10 was a large sum to a factory operative, it would hardly outweigh the dread of the master's displeasure, the probable dismissal and loss of livelihood.2 It appears from evidence given before the

 ⁴² Geo. III., c. 73.
 See Weyer's "Englische Fabrikinspektion," pp. 16 to 18.

committee that no operative who gave information, or even appeared as a witness against his master, could get employment anywhere in the district where he was known or where his name could be reported for his identification. There was also the fact, probably overlooked by the framers of the earlier Acts, that the operatives were often (as they are to this day) themselves the employers of the children. The Report of the Commission of 1833 contains a table 1 showing that in seventy mills in Lancashire about half the number of workers under eighteen were employed by operatives instead of directly by factory occupiers. The industrial organisation was thus described by Wm. Longston before Sadler's Committee2:-" A spinner has piecers; they are universally persons who are under the age limited by the law for protection; in case the piecers are taken away from the spinner, he finds them a difficulty in turning off the quantity which is required; and even were it not so, a wish to do as much as they can causes them to keep the piecers more than the law prescribes; the spinners in general (though some of them are wellmeaning people), I think, deserve at the very least censure for their eagerness to keep these little piecers in the factory so many hours." J. Turner³ said the law was generally obeyed in Manchester with only one or two exceptions; but within eight or ten miles was openly violated. The method of evasion was as follows: "A man with a number of children employed under him, say a spinner with three piecers, will send out one of these piecers at a time, when two children will have to do the work of three; and by these means he can work an hour or an hour and a half longer each day. Now, if only a few of the children were sent out, the master would have a pretext to say that he had turned out the children, that none worked more than twelve hours, while perhaps one-half of the children worked

¹ Supplementary Report, 1834, XIX., p. 509.

² Q. 9,385. ³ Q. 7,351, &c.

thirteen and a half hours. In these instances, where the children are turned out, professedly in obedience to Sir John Hobhouse's Bill, the direct effect is that it imposes an equal term of confinement, calculated upon the whole day."

It is necessary to recognise that the operative class themselves were in this way largely committed to the system of child labour and long hours. Some, whether from need or demoralisation, lived on their children's earnings; others made a profit from employing their own or their neighbours' children; and, however much the better-minded and more intelligent might revolt against the system, there was enough solidarity amongst them to make the position of an informer invidious and impossible. If, however, a complaint was made, it was easy for the master to escape the penalty by pleading failure of water power or some cause of exemption allowed by the Act, and the threat of dismissal was enough to induce the operatives to swear to any such statement. The infliction of a fine was too rare to form a motive for obedience to the law, as the offender could set against it the gain from many profitable evasions.

Where was the remedy to be sought? The Tories seem to have looked for it in the direction of heavier penalties and larger rewards. Lord Ashley wished that, in case of death from accident due to negligence in fencing and guarding machinery, the employer should be committed for trial for manslaughter, and that, for other offences, both the fine and the reward to the informer should be increased. He brought in a Bill in 1833 which enjoined that the register of work-time should be sent quarterly to the clerk of the peace, with a written declaration on oath that the employer had observed all the legal requirements during the past three months, false entries being punishable by a fine of from £50 to £100 (half going to the informer), and also rendering the employer liable to trial for perjury. The penalty for ordinary offences was

still to be £5 to £20; but this was to be doubled for a second conviction, trebled for a third, and in the last case a term of imprisonment over and above the fine was to be imposed. Oastler had, in similar cases, advocated flogging and the pillory.1 None of these expedients, however desirable on principles of abstract justice, would have met the practical difficulty of getting operatives to complain when it was contrary to their interest and esprit de corps to do so. The enthusiastic advocates of the ten hours day, in their natural and righteous indignation against the evils of the factory system, seem to have overlooked a fact easily recognisable by us at a later date-namely, that it was not so much a war between manufacturers and operatives that was being waged as a disease from which the industrial community was suffering. The Liberal Government of that day, which generally receives very hard measure from philanthropic writers on the subject, was on this point more clear-sighted than its opponents. solution was suggested in part by the manufacturers themselves-that is to say, by those who were invited to advise and give information to the Commissioners of 1833.

The plan they favoured was that of appointing officers charged with the duty of inspecting the factories at regular intervals, and with full power to have the law put in force. This was represented to the Commissioners as the only effective means of enforcing regulations "relating solely to children and not directly conducive to the immediate interests either of masters or operatives." The Commissioners somewhat cynically remark that the proposal was urged upon them chiefly by those manufacturers who desired to see the hours in other factories restricted to the level of their own, but they accepted the recommendation and embodied it in their report. Then the question

¹ Report of Sadler's Committee, H. C., 1831-2, Vol. XV., Q. 9,831.

arose, how should this new service, for which there was no precedent or experience, be constituted? The manufacturers wished for locally resident officials, who should be endowed with exclusive jurisdiction over complaints relating to infractions of the factory laws. The Commissioners rejected this proposal on the score of expense, and favoured the appointment of itinerant inspectors, who should make circuits of the manufacturing districts, and have the right of entering all factories where children were employed, of ordering machinery to be fenced, and of directing all arrangements of a sanitary nature, whilst they were also to take cognizance of the arrangements for the education of the children employed. This suggestion was published in the report and adopted in the Bill. formed the turning point of factory legislation. have here one of the first instances of a special department of the central Government being created for the purpose of administering a particular Act. It was probably due to the well-known zeal for centralised administration of Mr. (afterwards Sir Edwin) Chadwick, a member of the Commission. The introduction of an external authority, free from local bias and partiality, greatly improved the administration of the law, lessened the friction between manufacturers and operatives, and provided a medium of communication between the Government and the people at a time when knowledge of industrial matters was scanty in the extreme. The Factory Act of 18331 thus made possible a great advance in administrative efficiency, and was in that respect superior to the Bills it displaced. In the measure of protection which it afforded it was somewhat less generous.

It prohibited night work (that is to say, work between 8.30 p.m. and 5.30 a.m.) to all under eighteen, employed "in or about any Cotton, Woollen, Worsted, Hemp, Flax, Tow, Linen, or Silk Mill," with the exception of some

subsidiary industries and of lace-making, which were expressly exempted. No person under eighteen was to be employed more than twelve hours a day or sixty-nine a week. No child under nine was to be employed at all except in silk mills. Lord Ashley's Bill, by the way, would have done away with the exemption of silk mills from this rule. No child under eleven, during the first year, twelve, during the second, or thirteen, during the third year, after the passing of the Act, was to be employed more than forty-eight hours a week or nine in one day. The Government took great pride in this special limitation for young children, for whom, they said, a Ten Hours Bill, such as Sadler and Lord Ashley had successively introduced, was not sufficient protection. Experience has, however, shown the difficulty of making distinctions of this kind, and the advantage of a uniform rule. Its advisability was disputed on medical grounds, thirteen not being a good age at which to increase the burden of work. In silk mills children under thirteen might work ten hours a day. One hour and a half meal-time was to be allowed. and children were not to be permitted to remain after hours in the same room with the machinery or in the mill. Another section noticed the failure of justices to inspect the mills, and required the appointment by the Government of four persons as inspectors, who were given power to enter at will any factories at work, to examine the children, to make enquiries, to call witnesses, and to summon any person to give evidence. The inspectors were also empowered to make such rules and orders as might be necessary, these to be binding on all persons subject to the Act, and to enforce school attendance. They were to make reports twice a year, and to meet also twice a year to confer on their duties and proceedings under the Act in order to attain as much uniformity of action "as is expedient and practicable." The penalty for offences against the Act was from fit to figo, or, at discretion, nothing, and the penalty for obstructing an inspector

42 HISTORY OF FACTORY LEGISLATION.

in the discharge of his powers was not to exceed £10. Finally, by a remarkable blending of judicial with executive authority, the inspectors themselves were granted powers co-ordinate with those of a justice of the peace, "as regards the Execution of the Provisions of this Act."

CHAPTER IV.

THE TEN HOURS MOVEMENT.

Oastler's agitation and the Short Time Committees-Hobhouse's Act, 1831—Sadler's Ten Hours Bill—Sadler's Committee—Demand for Restriction on Motive Power—Leadership taken by Lord Ashley—Commission of 1833—Factory Act, 1833—Hindley's Ten Hours Bill—Election of 1841—"Free Traders" and "Factory Reformers"—Act of 1844—State of Political Parties—Election of 1847-The Ten Hours Act.

As we have seen in our first chapter, the magistrates at the Manchester Quarter Sessions of 1784 deserve to have the credit of being the first to publicly propose a ten hours day. They resolved unanimously that it was "highly expedient for the Magistrates of the County to refuse their allowance to indentures of Parish Apprentices whereby they shall be bound to owners of cotton mills and other works, in which children are obliged to work in the night or more than ten hours a day." It was Sir Robert Peel, in 1815,2 who brought forward what was always referred to as the first Ten Hours Bill; though it was to apply only to apprentices and other children employed in cotton manufactories. Outside Parliament, amongst the operatives and the popular agitators, the demand was always for an Act which would either directly or indirectly limit the labour of adults as well as of children.3 In 1817 Robert Owen was advocating an eight

(Italics added.)

¹ Reports, 1814—15, Vol. V. ² See Hansard, Vol. XXXI., p. 624.

³ See, for example, petition presented "trom several spinners and others employed in the cotton manufacture in the city of Carlisle . . . praying the House to adopt such measures as will . . . restrict the labour of children and others in the cotton mills to a period daily which will permit their education and promote their health and future welfare in society." Hansard, Vol. XXXIV., p. 1.

hours day, and in 1818 the operative cotton spinners of Manchester petitioned Parliament for a universal ten and a half hours day, with nine hours for actual work. But these were merely isolated attempts to shorten the hours of working, and did not form part of the great Ten Hours Movement which lasted for over thirty years.

Although this movement may be traced back as far as 1825, Philip Grant, afterwards one of the leaders, says that "the agitation in those days was confined to the cotton districts, and even here it only reached a few of the principal towns, such as Manchester, Stockport, Bolton, Blackburn, and one or two others. Indeed, any meddling with the subject was unpopular, even amongst the masses, and was attended with risk and imminent danger to the situation of any workman that took part in it."2 It was not until 1830 that the movement got a real hold of the working classes, and it was from Yorkshire that the impetus came. On September 29th of that year Richard Oastler, of Fixby Hall, was staying with John Wood, a large Yorkshire manufacturer, who had for some time been endeavouring in a quiet way to improve the conditions of factory employment. He enlisted the sympathy of Oastler on behalf of the factory children by describing their condition as worse than that of East Indian slaves. It must be remembered that at that time woollen mills were entirely unregulated by law, and it was the usual custom to employ children for thirteen hours in woollen mills and twelve and a half hours in worsted mills, exclusive of meal times.3 According to the Leeds Mercury, a Whig paper, it was an admitted fact that the children

See Hansard, 3 S. Vol. XXXVII., p. 264.
 History of Factory Legislation, by Philip Grant, p. 121.
 "In the worsted mills they (children) are employed thirteen hours, with an interval of only half an hour, and in the woollen mills they work fifteen hours, with the interval of two hours for meals; they are therefore actually at work twelve and half hours in the former case, and thirteen hours in the latter." Leeds Mercury, October 30th, 1830. See also evidence given by the Rev. G. S. Bull before Sadler's Committee, H. C., 1831—2, Vol. XV., p. 418.

worked thirteen hours a day in the factories at Bradford, with only half an hour's intermission. "This," says the Mercury, "is the case in the vast manufacturing establishments: in others fourteen and even fifteen hours' labour has been exacted, with the same small interval for meals and rest." In the neighbouring villages children are described as being employed overtime, and in particular instances from five o'clock in the morning until nine o'clock at night, with only half an hour for dinner.

Oastler's first step was to write a series of letters to the Leeds Mercury, and afterwards to the Leeds Intelligencer, headed "Slavery in Yorkshire,"2 denouncing the factory system, and demanding, on the grounds of humanity, a ten hours day for all under twenty-one years of age. In this way public attention was called to the matter, and though Oastler's violent language alienated the sympathy of many, yet none were found to contradict his statements.

An example of the kind of replies sent to Oastler by newspaper correspondents may be given by quoting from a letter written by Samuel Townend, who was opposed to legislative interference with woollen mills. He began by admitting that "the hours of labour, with the intervals in the factories, are as Mr. Oastler states. But," he went on to say, "the occupation of the children is far from laborious, and consists chiefly in the quickness and attention given to the machine, allowing them abundant time to take refreshments during mill hours. . . . I am decidedly convinced that the present method of bringing children forward to useful employment is far from being 'horrid slavery in worsted mills,' that it is rendered a comfort by the regular hours of rising from and retiring to bed; and the most systematic regulation by which refreshments are brought to them." The writer

¹ Leeds Mercury, October 30th, 1830. ² See Leeds Mercury, October 16th, 1830, &c., and Leeds Intelligencer, November 11th, 1830, &c.

went on to describe how the factory children rose to maturity "governed in the School of Industry, useful and efficient members of society, destitute of those vagabond propensities which too often attach to children who are left to ramble at large until twelve or fourteen years of age." 1

The appearance of Oastler's letters on Yorkshire slavery mark the beginning of the popular agitation. The most prominent leaders in the movement were Oastler, the Rev. G. S. Bull (Vicar of Bradford), the Rev. J. R. Stephens (who began life as a Wesleyan minister and took a leading part in the Chartist movement), John Doherty (general secretary of the Federation of Cotton Spinners, and a prominent Chartist), George Condy (editor of the Manchester and Salford Advertiser), and Philip Grant. movement was not confined to any one political party. The Short Time Committees were spoken of as a "strange combination of Socialists, Chartists and ultra Tories,"2 Oastler was a Tory to the end of his days, but most of the popular leaders were extreme Radicals. Nor were the Parliamentary leaders drawn from one party. Michael Thomas Sadler, who took the lead in 1831, was a Tory. He was succeeded by Lord Ashley, also a Tory. John Fielden, who took Lord Ashley's place during his temporary retirement from the House in 1846, had been brought up as a Tory, but had become a strong Radical. Amongst other supporters the most prominent were Charles Hindley, Liberal member for Ashton, Lord John Manners, Tory member for Newark, and Joseph Brotherton, Liberal member for Salford.

The first practical result of the newspaper controversy was Hobhouse's Bill of 1831, which, as first drafted, proposed to limit the hours of all persons under eighteen to eleven and a half hours a day, with one and a half hours for meals, and this was to apply to woollen and silk, as

Leeds Intelligencer, October 21st, 1830.
 Leeds Mercury, March 23rd, 1844.

well as to cotton mills. This Bill received warm support from the operatives of the West Riding.1 But the hours of work for young persons were afterwards extended from ten to twelve a day, and the Bill as passed, owing to the opposition of the Scotch members and the West of England woollen manufacturers, applied only to cotton mills. The woollen manufacturers had raised a twofold objection. In the first place, they maintained that the proposed regulation of hours of employment in woollen mills would be ruinous to the owners of mills turned by water, because in such mills the hours were necessarily irregular. Secondly, they said that the prohibition of night work would compel many masters to make a very great outlay in additional buildings and machinery, or else give up nearly half the amount of their business.2 After this failure the Yorkshire operatives began a vigorous campaign. Enthusiastic meetings were held in the manufacturing towns of the West Riding, and gradually the movement spread to Lancashire, where the old Short Time Committees were once more revived.

Complaints were made of the ineffectiveness of Hobhouse's Act. At a meeting of clergy and gentry in Manchester³ it was stated that the law would not have been observed at all had it not been for the formation of an association to prosecute those who violated its provisions. As Charles Hindley expressed it: "The mistake of Parliament has arisen from supposing that they could effectively legislate for children without including adultsthey are not aware that the labour in a mill is, strictly speaking, family labour, and that there is no longer the system of a parent maintaining his children by the operation of his own industry."

In the autumn of 1831 there was a General Election, and the operatives, though not of course enfranchised,

¹ See Leeds Intelligencer, April 14th, 1831, and Voice of the People, April 16th, and April 23rd, 1831.

² See Leeds Mercury, March 12th, 1831.

³ See Manchester Guardian, March 10th, 1832.

could do much, when strongly organised, to influence public opinion. They determined not to support any candidate who did not declare himself to be in favour of a Ten Hours Bill.¹ Sadler was returned for Aldborough, in Yorkshire, pledged to introduce a Ten Hours Bill as soon as Parliament should assemble. The whole of the West Riding was thoroughly aroused, and the following resolutions, passed at a public meeting at Leeds, are but an instance of similar resolutions passed at many other places:

I. "That the practice of working young children in mills and factories from twelve to sixteen hours a day, and in some instances thirty-five hours, with but very short intermission for meals, is greatly to be deplored, inasmuch as such a system has an exceedingly pernicious effect on their

constitutional vigour, health, and morals.

2. "That ten hours per day is as long a period for the juvenile population to labour as is consistent with the preservation of health, the allowance of necessary relaxation and rest, and the well-being of society at large, and that it is a stain on the character of Britain that her sons and daughters, in their infant days, should now be worked longer than the adult mechanic, agricultural labourer, or negro slave.

4. "That a restrictive Act would tend materially to equalise and extend labour, by calling into employment many male adults, who are a burden on the public, who, though willing and ready to work, are obliged, under the existing calamitous system, to spend their time in idleness, whilst female children are compelled to labour from twelve to sixteen hours per day."²

In this last resolution we get an insight into one of the motives which lay behind what would at first sight appear to be a merely humanitarian concern for the welfare of the children. The operatives acknowledged that one of their objects was that more adult males might be called

¹ See *Leeds Intelligencer*, September 22nd, 1831. ² *Leeds Intelligencer*, October 29th, 1831.

into employment. But from the addresses of the speakers at the meetings, and the evidence given before Sadler's Committee and the Parliamentary Commission of 1833, we are left in no doubt that the chief object kept in view was that, by the limitation of the hours of children and young persons, the hours of labour of adults should themselves be regulated.1 John Doherty, speaking at a meeting of the National Association, at Manchester, declared that "men were as much entitled to protection for their labour as masters were for their machines. But men would not

apply for it till convinced it was practicable." 2

Again, the Manchester and Salford Advertiser, in an article on the Short Time Bill, referred to the fact that the chief obstacle to some effective legislative enactment had hitherto been found in the arguments brought forward by political economists. "The great difficulty has been to persuade sages like Mr. Hume to pass laws to restrain free labour, it being totally overlooked, in the first place, that Englishmen are not free, that it is because they are not free that they are seeking to become so. It is . . . to avoid this stumbling block that the attempts at regulation have been confined to the case of persons under age, though the effect of really preventing them from working beyond fixed hours must have been to interfere with the labour of adults also. It is to avoid this stumbling block that Mr. Sadler has adhered to the principle of legislation for children only."3

While political economists were propounding their theories of the advantages of laissez-faire and freedom of contract between employers and employed, the men who were brought face to face with industrial conditions recognised that there was no such thing as freedom of contract. Even such an investigator as Dr. Kay, who

¹ See also evidence given before the Select Committee on Combinations of Workmen. Parliamentary Papers, 1837—8, Vol. VIII., Q. 1,368, 3,665, &c.

² Voice of the People, April 16th, 1831.

³ Manchester and Salford Advertiser, March 10th, 1832.

was himself opposed to any State interference with the hours of labour, thus describes the condition of the operative:—"Whilst the engine runs the people must work—men, women, and children are voked together with iron and steam. The animal machine—breakable in the best case, subject to a thousand sources of sufferingis chained fast to the iron machine, which knows no suffering and no weariness."1

The operatives themselves knew that the adult factory worker was not free to bargain for the conditions under which he should work, that the employers were not free to offer what conditions they liked, and that "without a legislative regulation of the hours of labour the kind and benevolent employer cannot stand against the competition

of his less feeling rival."2

Tufnell, one of the Commissioners who collected evidence for the Parliamentary Commission of 1833, said that the fact which had struck him most in the course of his investigation was the different grounds on which the Ten Hours Bill was advocated in Parliament, and in the manufacturing districts. He described the cruelty of employing young children for long hours, and the ill usage to which they were submitted, as the "Parliamentary and public ground" for supporting the Bill. "But," he went on to say, "not a single witness that came before me to give evidence in favour of the Ten Hours Bill . . . of whatever trade or station he may have been, supported it on the above grounds. . . . I am perfectly satisfied that motives of humanity have not the smallest weight in inducing them to uphold the Ten Hours Bill."3

In support of this view he stated that "the desire for

² See resolutions passed at meetings of operatives at Keighley and

Dewsbury. Leeds Intelligencer, February 2nd and 9th, 1832.

3 Children's Employment Commission. Report by Mr. Tufnell.
Parliamentary Papers, 1834, Vol. XIX., p. 195.

^{1 &}quot;Moral and Physical Conditions of the Operatives Employed in the Cotton Manufacture in Manchester," by James Philip Kay, 1832, p. 24.

the Ten Hours Bill exists almost wholly among the working spinners, who are the chief supporters of the cry about the inhumanity of employing young children in factories and the narrators of the cruelties practised upon them, which cruelties, it appears, if practised at all, are only practised by themselves."1

By the beginning of 1832 the movement had got a firm hold of the working classes of Yorkshire and Lancashire, and had spread to London, where a Society was formed for the Improvement of the Condition of Factory Children.² Sadler's Bill had been introduced and referred to a Select Committee,³ which was engaged in collecting information throughout the Session of 1832. The main provisions of the Bill were that no person under eighteen should be employed for more than ten hours a day, nor for more than eight hours on Saturdays. No person under the age of twenty-one was to be employed during the night, which was defined to be from 7 p.m. till 6 a.m., and no child was to be employed under the age of nine years. The only regulation for enforcing the Act was that a time book was to be kept. The Yorkshire operatives, who had hitherto had no experience in the operation of Factory Acts, failed to see the deficiencies in Sadler's Bill, and in a series of enthusiastic meetings passed strong resolutions and forwarded petitions in its favour.4 The meetings in the various towns culminated in a huge county meeting at York on Easter Tuesday, April 24th, which was attended by over twelve thousand persons.

According to the Leeds Mercury account, "The meeting was attended almost exclusively by the manufacturing

¹ Ibid., p. 194. According to one of the witnesses, the Short Time Committees were composed of spinners, weavers, dressers, card-room hands, and engravers. 1833, Vol. XXI., p. 187.

² Manchester Guardian, April 7th, 1832.

³ See Hansard, 3 S., Vol. II., p. 340, March 16th, 1832.

⁴ See, e.g., accounts of meetings reported in *Leeds Intelligencer*, January 12th, February 2nd and 9th, 1832.

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operatives of the West Riding, a considerable proportion of whom, being out of employment, were conveyed to York by subscription. . . . Uncommon zeal and perseverance were displayed, all the men going on foot, and travelling by night as well as by day, through an almost incessant fall of rain which lasted the whole of Monday and Tuesday, and which drenched them to the skin. . . . Scenes of immense confusion and real misery took place, both at Leeds and York, especially at Knavesmire, where the supply of bread which had been expected did not arrive, and all York was swept in vain to obtain adequate supplies for the fatigued and famished multitude. . . . The parties from the more distant places did not reach home till late on Wednesday night, or even Thursday,"1

In Lancashire, during the spring of 1832, similar meetings were held, but the distinguishing feature about the movement in Lancashire was the demand for a restriction on the motive power of machinery, so as to make it illegal for the machinery to be worked except during a specified period each day. This was advocated on the ground that such a restriction would ensure the enforcement of the regulation of the hours of employment.³ The cotton manufacturers and operatives had already experienced the inefficacy of Factory Acts, which contained no provisions for securing their enforcement, and even the manufacturers showed anxiety for a legislative enactment which should be uniform in its operation. At a meeting of master spinners, held in Manchester, a petition was drawn up in which the opinion was expressed that "whatever measure be adopted, it ought to be made equal and effectual in its operation, and that from an accurate and attentive examination of the working of the last Act." they were convinced that "no measure can be made effectual

¹ Leeds Mercury, April 28th, 1832. ² See resolutions passed at meetings of Lancashire operatives. Manchester and Salford Advertiser, March 17th and 31st, 1832.

which does not place the restriction upon the power by which the machinery of mills and factories is propelled."1

It would be a mistake to suppose from this that the Lancashire Ten Hours advocates were supported by the manufacturers. The manufacturers contended for an effective Bill, whatever the number of hours might be, and the majority were in favour of some enactment which would have made Hobhouse's Bill effective. The operatives, on the other hand, demanded a ten hours day, with a restriction on the motive power, but if the two objects were not attainable at once, they declared they would rather have an ineffective Ten Hours Bill than an effective one for eleven or twelve hours, because they thought that, having fixed the time, the Legislature would be bound in time to adopt means to enforce the limitation; whereas it would be a more difficult matter to reduce the hours when once an effective Act had been passed.2

In the meanwhile Sadler had failed to get a seat in the reformed Parliament. He stood for Leeds, but in a hard fight, which turned largely on the factory question,3 he was defeated by Macaulay, who was at that time adverse to any legislative regulation of the labour of adults. The leadership then passed to Lord Ashley, who, at the

¹ Manchester and Salford Advertiser, February 25th, 1832.

See Manchester and Salford Advertiser, March 31st, 1832.
See letter from Oastler to the operatives of Leeds; also the account of Sadler's entry into Leeds, and the reception given to him by the "ten hours men." *Leeds Intelligencer*, September 6th, 1832. See also Macaulay's speech to the electors of Leeds, of which the following is an extract:—" Gentlemen, permit me to say that though I distinctly admit that the employment of children in factories does require regulation, I can by no means admit that those topics which I have so often heard advanced on that subject have in them any soundness, and . . . I say that if the labouring classes expect any great or extensive relief from any practical measure of legislation, they are under a delusion. (Hisses.) I believe that they are confounding the symptoms with the disease. . . . I believe that the overworking of children is not the cause but the effect of distress. ('No, no.') . . . Against cruelty, against oppression, and against the excessive overworking of children who are of too tender an age to have the care of their own affairs, I have as fixed and firm an opinion as any one who hears me." Leeds Intelligencer, September 6th, 1832.

request of the Short Time Committee, promised to take up Sadler's Bill; but his efforts during the Session of 1833 were defeated by the introduction of a Government Bill, and a Commission of enquiry was appointed, on the ground that the Report of Sadler's Committee had been of a partisan character. This was bitterly resented by the operatives, who considered the Commission a mere device for delay. An appeal was sent by the Manchester operatives to the King, petitioning him to withhold, or if issued to recall, the Commission. When it was found that such measures were unavailing, the Short Time Committee decided that they would refuse to give evidence, and presented protests to the Commissioners on their arrival in the various towns. The general feeling throughout Lancashire and the West Riding is forcibly expressed by the following resolutions, passed at a meeting of protest held in Huddersfield before the arrival of the Commissioners.

I. "That the present factory system can no longer be endured, that the evils it does inflict, and has inflicted, are unspeakably grievous to the working classes and their children, and that the enemies of the poor have added treason and insult to injury, by abusing the prerogative of the Crown, and appointing a set of worthless Commissioners to perpetrate infant murder.

2. "That we are at a loss for words to express our disgust and indignation at having been threatened with a visit from an inquisitorial itinerant to enquire whether our children shall be worked more than ten hours a day; we are at once and for all determined that they shall not."

The same meeting sent a petition to the House of Commons begging that "the pay and expenses of the Commissioners may not be taken from His Majesty's Exchequer; that the persons who have authorised this method of secret examination may be impeached; that

¹ See Leeds Intelligencer, May 13th, 1833. ² Leeds Intelligencer, June 22nd, 1833.

Lord Ashley's Ten Hours Factory Regulation Bill may be passed without any delay."

In Leeds, at a meeting of operatives it was unanimously agreed not to communicate with the Commissioners in any way, on the ground that the Commission constituted a "tribunal adverse to the Ten Hours Bill in origin, adverse in spirit, adverse in object, adverse probably in instruction."

In the meantime, Lord Ashley had introduced his Bill, by which the enforcement of the law was to be secured by the drastic penalty of imprisonment for a third offence against its provisions. There was considerable controversy over this clause. The Yorkshire operatives, at the instigation of Oastler, were determined that it should be retained, whilst the Lancashire men, headed by Doherty and Philip Grant, were more moderate in their demands.2 In spite of the enthusiastic support given to Lord Ashley, he was obliged to abandon his Bill on the introduction of Lord Althorp's Government measure, which embodied the chief recommendations of the Commissioners. most noteworthy features of this Bill were that two sets of children might be employed for a maximum period of eight hours each, and that the Act should be enforced by Government inspectors. Both these provisions met with violent opposition on the part of the Ten Hours men. It was contended that the system of two sets was simply a device to satisfy the universal demand for the protection of children from over-work, and at the same time enable the manufacturers to keep adults employed for sixteen hours a day.3 The provision for inspection met with nothing but ridicule. It was assumed that as the inspectors were to be appointed by Government they would necessarily be mere tools in the hands of the manufacturers.

¹ Leeds Intelligencer, May 18th, 1833. ² See History of Factory Legislation, by Philip Grant, p. 52. See also Leeds Intelligencer, July 6th, 1833. ³ See letter from J. Fielden to William Cobbett, reprinted in The

Pioneer, December 21st, 1833.

The Leeds Intelligencer thus expressed the popular sentiment:-"The inspectorships are a lumbering affair, and will turn out in practice, we suspect, a nullity; their chief recommendation with their projectors is probably the patronage they afford."1 The Rev. G. S. Bull spoke of their "arbitrary powers," and said that "if these inspectors, in whose appointment the mill owners will have due influence, should take the sides of their patrons and masters, so extensive, so arbitrary are their powers that we shall want nothing but the torture room to complete their character and office as factory inquisitors." 2 The popular indignation found expression at a record meeting on Wibsey Low Moor, near Bradford, on July 1st, 1833,3 when between a hundred and a hundred and fifty thousand people assembled to protest against any mutilation of the Ten Hours Bill. Petitions were drawn up, and delegates were sent to London to oppose the Government measure, but to no purpose. The Bill as passed was pleasing to no party. The popular agitation had made legislation of some kind absolutely necessary, and Poulett Thompson, the Vice-President of the Board of Trade, who had taken an active part in carrying it through, spoke of the measure as "an evil forced upon the Government." The Ten Hours men declared that there was greater cause than ever for strenuous exertion. Fielden originated a scheme, by which on the day the Act came into operation all adults were to strike for an eight hours day, with the same wages that they had had for twelve hours. This was advocated on the ground that the Legislature was "too slow for the people, and the adults in factories must by unions amongst themselves make a Short Time Bill for themselves."4 committee was formed, which consisted of such leaders in the Ten Hours movement as John Fielden, Robert Owen.

¹ Leeds Intelligencer, August 10th, 1833. ² Leeds Intelligencer, September 28th, 1833.

⁸ See Leeds Intelligencer, July 6th, 1833. ⁴ See Letters to Cobbett's Weekly Register, reprinted in The Pioneer, December 21st, 1833.

George Condy, John Doherty, and Philip Grant. Robert Owen went into Yorkshire for the purpose of advocating this scheme, but when the time came the men were unprepared, and postponed action until June 2nd, and then until September 1st, after which we hear nothing more of the proposal. The Oldham operatives did indeed, in April, 1834, strike for an eight hours day, and the workers in all trades, both men and women, ceased work, "and held huge meetings on the moor, where they were addressed by Doherty and others from Manchester, and demanded the eight hours day." But nothing came of this, and within a week work was resumed. The Short Time Committees decided to give the Act a fair trial, and the years 1834 and 1835 were spent in watching its operation and reporting to the Central Committees in Manchester and Bradford what was going on in the districts.

In December, 1835, an important meeting took place in Manchester between delegates from the spinners and the Lancashire members of Parliament.2 The object was to get the opinion of the operatives on the Act of 1833 and to show its utter inefficacy. The delegates expressed themselves freely, and complained that the inspectors had neglected their duties. Charles Hindley, in the course of a long speech, said that this measure, which was intended for the protection of children employed in factories, had almost entirely failed in its object, and the question then arose by what means it could be made effectual. Resolutions were passed in favour of a Ten Hours Bill, with a restriction on the moving power. Similar meetings were held throughout Lancashire in the following January, at which it was declared that many years' experience had shown that "all attempts made by the Legislature for the protection of those employed in factories will be set at

¹ History of Trade Unionism, by Sidney and Beatrice Webb, p. 137.
² See Manchester and Salford Advertiser, December 5th, 1835.

nought, and rendered completely abortive, unless the restriction be put upon the machinery."

A Ten Hours Bill was then drawn up by Hindley, embodying these resolutions. Local committees were formed, and six delegates-four from Lancashire and two from Yorkshire—were sent to London to assist him in getting his Bill through. It had been printed and widely circulated, when Poulett Thompson, on March 15th, introduced a Government measure to repeal the thirteen years of age clause in the Act of 1833, and so enable all over twelve years of age to work full time. This provision was only just about to come into force, and the proposal to repeal it gave a tremendous impetus to the agitation outside Parliament. The supporters of the Ten Hours Bill were up in arms, and Oastler, Stephens, and Bull addressed crowded meetings in the manufacturing districts. The movement now assumed a different character, and petitions took the form of strong remonstrances. Dissatisfied as the factory workers were with the Act of 1833, they realised that it contained important principles. They seem by this time to have begun to recognise the benefits of inspection, and now that the Legislature had laid down eight hours as the limit, they were indignant at the idea of the hours for children being increased on any other condition than that ten hours a day for all under twenty-one years of age should be substituted.2

1 See speech of George Condy, at Ashton, reported in Manchester

and Salford Advertiser, January 23rd, 1836.

² See Manchester and Salford Advertiser, February 13th, 1836, in which an account is given of a meeting at which the following resolution was moved by the Rev. J. R. Stephens:—"That this meeting will resist, by all lawful means within its power, any attempt which may be made to repeal the eight hours clause of Lord Althorp's Factory Act, on any other condition than that ten hours for all under 21 years of age be substituted in lieu thereof, and that as the Legislature has already acknowledged the great principle of education and inspection, this meeting recommends that in all their future deliberations on this subject, they make it imperative on all parties employing children in such mills and factories to adhere to the law in this respect."

Oastler and Bull, in a circular issued to the factory workers in February, 1836, urged them "to agree to nothing longer than ten hours for all between fourteen and twentyone, and to insist on it that all under fourteen should work only eight hours, according to the solemn, deliberate, and humane sentence of the Parliament of 1833."1 Petitions against Poulett Thompson's Bill were sent to the House of Commons. One from Manchester alone was signed by 33,000 operatives. It was arranged that Lord Ashlev should move the rejection of the Bill, or propose as an amendment that all persons under twenty-one should work only ten hours a day. In the event of the amendment being carried, Hindley was to propose in committee a restriction on the motive power.2 On the motion for the second reading, on May 9th, the Government had a majority of only two, and Poulett Thompson was obliged to withdraw his Bill. Hindley then asked leave to introduce his measure, but the time was declared to be unfavourable, and he was persuaded to withdraw it, after receiving an assurance from Lord John Russell that the provisions of the Factory Act of 1833 should in future be strictly enforced. This promise was not kept, and preparations were therefore made for the renewal of the contest in the following Session. At a meeting of operatives and manufacturers in Manchester in January, 1837, Fielden referred to the spirit of bitterness and growing disappointment which was being manifested on the part of the operatives, owing to the failure of their repeated applications to Parliament, and he expressed a fear that it would lead to the destruction of property unless something were done to meet their demands.3 Owing to the repeated failure to enforce the law, a growing desire was manifested for a uniform working day of ten hours for all employed. was said that "the children and adults are so associated

¹ Manchester and Salford Advertiser, February 13th, 1836. ² See resolutions passed at public dinner given to Mr. Hindley, at Ashton. Manchester and Salford Advertiser, October 21st, 1837. ³ See Manchester and Salford Advertiser, January 28th, 1837.

in the work they have to do that they cannot be separated without inconvenience and loss, and that ten hours per day of actual labour in factories is as much as ought to be required from either children or adults."

There was no question amongst the operatives of interfering with the freedom of the subject when it was proposed to limit the hours of adults, for in their own words, the factory hands had "no choice but to follow the machine at whatever speed, or whatever number of hours it might be driven, or to starve." They spoke of their industry as "in bonds, bound to the tyrant power of machinery."

It was partly owing to these resolutions in favour of a ten hours day for all under twenty-one, that Lord Ashley was forced to abandon a Ten Hours Bill which he was to have introduced in April, 1837. He was reluctant to do anything which would involve an increase of child labour from eight to ten hours³ a day, whereas the operatives were anxious for a uniform ten hours day, even though it involved an increase of hours for children. The Short Time Committees were so well organised at this time that when, in the autumn of 1837, the Yorkshire mill owners attempted to bring about a compromise and induce the operatives to be satisfied with an eleven hours bill, they were able to send delegates in sufficient numbers to secure a majority of about six to one against the compromise, though they had received no notice of the meeting until four days before it was to take place.4

Little was done in 1838. The Government attempted to satisfy the demand for further legislation by introducing a Bill which left the hours of labour unaltered, and met with no support. Lord Ashley again drew the attention

² Ibid.

³ See Manchester and Salford Advertiser, April 21st, 1837.

¹ See Manchester and Salford Advertiser, January 28th, 1837.

⁴ See Leeds Mercury, November 11th, 1837, which gives an account of the above meeting. The Rev. J. R. Stephens, in a speech which lasted for two hours, said that the men of Lancashire would give up the Ten Hours Bill "only with their lives."

of the House to the evil, and to the need of an amending Act, but the question was shelved on the ground that Lord Ashley's concern for the children was not genuine, and that his real object was to restrict the labour of adults.

During the next three years the Short Time Committees were able to do little more than keep together. Trade was in a state of depression, the whole country was agitated by the Chartist movement, and the Ten Hours men had for a time lost two of their most active leaders—Oastler and Stephens—who were both imprisoned, Stephens for attending and addressing an unlawful meeting in November, 1838, and Oastler for a debt of £2,000, which had been contracted owing to his refusal to enforce the provisions of the new Poor Law.

Whatever may have been the cause, when the Government brought forward a Factory Bill in 1839, not a single delegate from the factory districts was sent to support Lord Ashley and Joseph Brotherton in their attempts to amend the Bill.

Two years later, in 1841, the Whig Ministry was defeated, and the Tories were returned to power with a large majority. In the West Riding, and in several manufacturing towns, the election was fought entirely on the factory question, and great things were hoped from the new Government. But it soon became apparent that many of the Tories had favoured factory legislation merely from party reasons, and now that they were in office were as obstructive to real reform as the Whigs had been. Sir Robert Peel formed a Cabinet with Sir James Graham as Home Secretary. Lord Ashley refused to take office on the ground that Peel's "opinions on the factory question were not matured."

In Parliament, the factory question, from this time

¹ See Life of Richard Oastler in the Dictionary of National Biography, Vol. XLI.

² See Letter from Lord Ashley to Mr. Mark Crabtree, secretary of the Yorkshire Central Short Time Committee. Reprinted in Hodder's "Life of the Seventh Earl of Shaftesbury," Vol. I., p. 359.

down to 1847, was really a part of the wider struggle between the agricultural landlords and the manufacturers over the repeal of the Corn Laws. "The Tories were taunted with the condition of the labourers in the fields, and they retorted by tales of the condition of the operatives in factories. The manufacturers rejoined by asking, if they were so anxious to benefit the workman, why did they not, by repealing the Corn Laws, cheapen his bread. The landlords and the mill owners each reproached the other with exercising the virtues of humanity at other

people's expense."1

The attitude of the Free-traders towards factory legislation is well expressed by William Cooke Taylor, who refers to the advocates of shorter hours as "those pseudophilanthropists who were exceedingly willing to be generous at the expense of the cotton manufacturers, but who are just as unwilling to be just in a far more atrocious case, which happens to touch their own pockets."² Speaking of the distress in the manufacturing districts, he says:-"A remedy, indeed, has been proposed which assuredly has no parallel in the annals of quackery. It is the 'Ten Hours Bill.' The proposers of the Ten Hours Bill have done more-in addition to puzzling posterity they have sorely bewildered the existing generation. At a time when the operatives are suffering from want of employment in consequence of fiscal restrictions on commerce, these pretended benefactors of the operative insist on the continuance of the restrictions, and then propose to diminish the time of his labour, thus increasing the price of his food and decreasing his means of purchasing it." To this argument the leaders of the ten hours agitation replied that these recurring periods of depression were in themselves a cogent reason for a further

3 Ibid., p. 131.

Morley's Life of Cobden, Vol. II., p. 300.
 "A Tour in the Manufacturing Districts of Lancashire," 1842, by

[&]quot;A Tour in the Manufacturing Districts of Lancashire," 1842, by William Cooke Taylor, p. 248.

limitation of hours. They argued that the twelve hours term of labour could not be maintained throughout the year; the attempt to do so, combined with the increased use of machinery, caused a constant recurrence of gluts due to over-production.1 The remedy for these gluts was a shortening of hours; and with the shorter hours the same amount of work would be got through in the year, because employment would be more regular. In reply to the argument that the operatives could not expect twelve hours' wages for ten hours' work, they maintained that price was dependent upon supply and demand, and that when there was over-production due to the increased use of machinery and the long hours of work, the price of manufactured goods was lowered, and it was not to be wondered at that, coincident with the over-production of machine-made goods, wages and profits had both decreased. But even assuming that wages might possibly be reduced to the same extent as the hours of labour, they argued that with a ten hours day as much work would be performed, in the aggregate, taking the whole year round, as was performed under a twelve hours limit, so that if the old rate of wages per pound, or per yard, or per hour were maintained, at the end of the year the same amount of capital would have been distributed in wages as before.2

labour, by means of shortening the hours of labour."

² See Letter from Messrs. Walker and Rand, quoted by Alfred in the "History of the Factory Movement," Vol. II., p. 176. See also speech by Fielden, reported in *Manchester and Salford Advertises*, December 24th, 1841, in the course of which he said it is "the duty of individuals to curtail the quantity of production when there is an over-abundant supply of the article they produce, rather than increase it and reduce wages." He considered that "a reduction of hours of

¹ See report of deputation from the Short Time Committees of the West Riding of Yorkshire, which waited upon Sir James Graham. *Manchester and Salford Advertiser*, January 8th, 1842. See also "Industrial Democracy," by Sidney and Beatrice Webb, Vol. I., p. 440, in which it is shown that, according to a circular issued by the Amalgamated Associations of Cotton Spinners, January 19th, 1845, one of their objects in supporting Lord Shaftesbury's Ten Hours Bill was to secure "a more equitable adjustment or distribution of labour, by means of shortening the hours of labour."

64 HISTORY OF FACTORY LEGISLATION.

In the summer of 1841 Lord Ashley made a tour in the manufacturing districts, for the purpose of conferring with the operatives and collecting information. It was a time of great commercial distress. Thorold Rogers says:-"The population of the manufacturing towns was rapidly thinning, and the inhabitants who remained were in serious straits. Cobden stated that in the borough which he represented (Stockport) one house in every five was empty. Harrowing tales were told of the miserable poverty to which the factory operatives were reduced. It was affirmed that men had died at their looms from the exhaustion of famine." In Bolton, out of 8,124 cotton operatives, 5,061 were either standing idle or working only four days a week.2 The general distress, and the presence amongst them of Lord Ashley, stimulated the operatives to renew the agitation. J. R. Stephens was once more out of prison, and Oastler, from the Fleet, was urging them to be "unanimous, vigilant, and energetic."3 In the autumn of 1841 the Short Time Committees were reorganised. Those in the West Riding were particularly active, and in November, 1841, sent a deputation to London to wait on Sir Robert Peel and other Ministers, and to urge upon them the importance of the factory question.4 The deputation also had interviews with Sir James Graham, Gladstone, and others; and met, on the whole, with a favourable reception. Perhaps the least satisfactory interview was that with Sir James Graham, of whom the report speaks as having "drunk too deeply at the fount of the Malthusian

labour from twelve to ten would have this tendency," and was therefore desirable, as they had already "got mills and machinery to produce more than they could find a vent for at a remunerating price."

Cobden and Political Opinions, by Thorold Rogers, p. 20.

3 Manchester and Salford Advertiser, October 9th, 1841.

² See Article on Depression of Trade at Bolton, by Henry Ashworth, Journal of the Statistical Society, April, 1842.

⁴ See reports of the deputation, reprinted in the Manchester and Salford Advertiser, January 8th and 15th, 1842.

philosophy . . . to be able to get rid entirely of its influence."

The most interesting feature about the report issued by the delegates, on their return from London, is that we now find the ten hours men bringing forward different arguments, and demanding for the first time (so far as we have been able to discover) special restrictions on women's labour. We have seen that, prior to 1833, concern for the children had been the alleged reason for the desire for a ten hours day. After 1833, when it was found that the reduction of the hours for children had been effected, but in such a way as not to limit the labour of adults, concern for the children could no longer be used as an argument for a ten hours day, and the reformers openly demanded the regulation of all factory labour enforced by a restriction on the motive power. In 1841, when they began to realise that it was hopeless to get the hours of children again increased to ten hours, and that a restriction on the motive power was not yet within the sphere of practical politics, they turned their attention to the women and fought the battle "behind the women's petticoats," just as the Lancashire cotton operatives did thirty years later.1 From 1841 to 1847 the question centred round the women. The deputation of 1841 contended that a ten hours day for all persons between thirteen and twenty-one was more urgent than ever, owing to the immense increase in the number of women working in factories. But there seems to have been also some fear that the women were displacing the men, for the deputation went on to request "the gradual withdrawal of all females from the factories." maintaining that "home, its cares and its employments, is woman's true sphere." When the deputation discussed this matter with Gladstone, he expressed his sympathy with the following recommendations:-I. To fix a higher age for the commencement of what they called "female

¹ See History of Trade Unionism by Sidney and Beatrice Webb, p. 297.

infant labour" in factories. 2. To limit the number of women in proportion to the number of men in one factory. 3. To prohibit the employment of married women in factories during the life-time of their husbands.¹

The restriction on the motive power was not mentioned by the members of the deputation, but the omission was probably due only to the fear of alienating the sympathy of the Government. That the reformers kept this object in view, ready to bring forward when practicable, we gather from their many references to the increased speed and use of machinery, to which they thought the repeated gluts and panics were entirely due.

During the year 1842 the commercial panic was at its height. It was said that the whole of the manufacturing districts were on the eve of a general bankruptcy. Lord Ashley was unable to introduce his Ten Hours Bill, as the Government had promised a Bill which, they said, would settle the whole question. This Bill was introduced by Sir James Graham in 1843, but not passed until the following Session.

The time between the Sessions of 1843 and 1844 was spent in preparing for another campaign. Philip Grant says:—" Never in the history of this great struggle were the friends of the measure better united, nor more resolved to persevere in their good cause. The note of preparation had been sounded in every town and village in the manufacturing districts, and one unanimous voice proclaimed a fixed and firmer determination to stand by ten hours and no surrender."²

The Government Bill of 1844 fixed the hours of young persons and women at twelve a day. The Short Time Committees sent delegates to London, who spent their time in canvassing the members. Their efforts were directed towards securing the limitation of the working

² History of Factory Legislation, by Philip Grant, p. 73.

¹ See report of deputation, reprinted in Manchester and Salford Advertiser, January 15th, 1842.

day from 6 a.m. to 6 p.m. The controversy came to a crisis on March 15th, 1844, when Parliament was definitely called upon to choose between the alternatives of a ten or a twelve hours day for women and young persons, on the distinct understanding that this would involve a similar limitation on the labour of adult men. 1 The result was a majority of nine for Lord Ashley's amendment that "night," during which the employment of women and young persons was illegal, should be the period from 6 p.m. to 6 a.m. instead of 8 p.m. to 6 a.m., as proposed by Sir James Graham. Thus Parliament had actually declared itself in favour of a ten hours day.

A recent report under the Children's Employment Commission² had demonstrated by numerous facts and instances that the loss and not the profit began in the last hour. Yet The Times, while welcoming the amendment as a triumph of humanity, evidently regarded it as a quixotically daring and chivalrous proceeding. "The defeat of Ministers on Lord Ashley's amendment is not a thing to invade the imagination and take it by storm. It appeals to the moral feelings. It is a triumph of humanity. We have to sit still before we can comprehend it. When all is hushed, when the inward ear begins to listen, and the inward eye to gaze steadily, then at last it dawns and grows upon us, though we can hardly believe it . . . that a few hours since . . . one legislative House of the greatest Empire in this world resolved on the largest national interference in favour of poverty and industry to be found in the history of this or any other country."3

¹ See, e.g., speech of Milner Gibson:—"It might be thought that by preventing young persons and women of all ages from working more than ten hours, the labour of male adults was not interfered with. But that was not so. To enact that no young persons or women of any age should work more than ten hours was, in point of fact, to enact that no factory engines should be kept in operation more than ten hours." Hansard, 3 S., Vol. LXXIII., March 18th, 1844.

See Children's Employment Commission. Parliamentary Papers,

^{1843.} Vol. XV., pp. 105, 106.

³ The Times, March 20th, 1844.

But the matter was not yet settled. The alteration in the second clause entailed the necessity of altering the eighth clause, which prescribed a maximum of twelve hours' labour, exclusive of meal times. Under ordinary circumstances this consequential substitution of ten hours for twelve hours would have been made as a matter of course; but Sir James Graham was obstinate, and on the 29th of March re-opened the discussion on the whole question. Lord Ashley moved his amendment of ten hours, but on a division being taken, there was a majority of three against it. Thus the House was in the peculiar position of having reversed the decision it had come to a few nights previously, and of having successively rejected both twelve and ten hours.

There is a well known and often quoted passage in the Greville "Memoirs" which describes the curious confusion which took place during the debate on Lord Ashley's amendment. The Leeds Times described the same thing in the following terms:—"The discussions and divisions on the Factory Bill have been of the most

¹ The passage referred to is as follows:—"I never remember so much excitement as has been caused by Ashley's Ten Hours Bill, nor a more curious political state of things, such intermingling of parties, such a confusion of opposition, a question so much more open than any question ever was before, and yet not made so or acknowledged to be so with the Government; so much zeal, asperity, and animosity, so many reproaches hurled backwards and forwards. The Government have brought forward their measure in a very positive way, and have clung to it with great tenacity; rejecting all compromise, they have been abandoned by nearly half their supporters, and nothing can exceed their chagrin and soreness at being so forsaken. . . . John Russell, voting for 'ten hours' after all he professed last year, has filled the world with amazement, and many of his own friends with indignation. . . . The Opposition were divided, Palmerston and Lord John one way, Baring and Labouchere the other. It has been a very queer affair. Some voted, not knowing how they ought to vote, and, following those they are accustomed to follow, many who voted against the Government afterwards said they believed they were wrong. Melbourne is all against Ashley; all the political economists, of course; Lord Spencer against Aincy, an the pointed continues, of course, Early species strong against him. Then Graham gave the greatest offence by taking up a word of the 'Examiner's,' last Sunday, and calling it a 'Jack Cade' legislation, this stirring them to fury, and they flew at him like tigers." Greville "Memoirs," Vol. V., p. 241.

confused and almost ludicrous kind. Whigs, Tories, and Radicals are jumbled together in inextricable disorder. Lord John Russell and Mr. O'Connell vote with Busfield Ferrand, for Hume and John Bright, with Sir James Graham! The Leaguers support the Tory Ministry and a twelve hours' term of labour, the 'Complete Suffragists' supported Lord Ashley and the ten hours clause."1 James Graham refused to make any compromise, or to leave the measure in Lord Ashley's charge. He himself prepared another Bill, which was passed in the same Session, and prescribed a maximum of twelve hours' labour for women and young persons, to be taken any time between 5.30 a.m. and 8.30 p.m.

The Ten Hours men were nominally defeated, but their hopes were raised by the fact that they had actually secured a majority of the House on the Ten Hours question, and were able now to reckon on their side such prominent Whig leaders as Macaulay, Lord Palmerston, and Lord John Russell. They were determined that the matter should not be allowed to rest. The committees kept together, and during the years 1846 and 1847 issued a widely-circulated weekly paper, the Ten Hours Advocate, 2 giving full details of the movement. In January, 1846, Lord Ashley again introduced his Ten Hours Bill, but shortly afterwards resigned his seat in Parliament owing to his growing conviction in favour of Free Trade. He entrusted his Bill to Fielden, who moved the second reading on the 29th of April,3 but was defeated.

About a month later Parliament was dissolved, the very day after the repeal of the Corn Laws, owing to the discontent in the Tory party caused by Peel's action. The Short Time Committees seized their opportunity. They were well organised, and the enthusiasm of the

¹ Leeds Times, March 30th, 1844.

² This interesting paper is unfortunately not in the British Museum, but can be seen at the Manchester Free Library.

² See Hansard, 3 S., Vol. LXXXV., p. 1,222, and Vol. LXXXVI.,

p. 1,080.

operatives was again stirred by Oastler, who had just been released from prison. The ten hours men fought the election independently of political parties, and invariably supported those candidates who pledged themselves to a Ten Hours Bill. Lord Ashley lost his seat, but a majority for the Ten Hours Bill was secured. Fielden again introduced it, its passage was comparatively unobstructed, and the third reading was carried by a majority of seventy-eight. Thus the Ten Hours Bill finally became law in a very quiet way. The Times,1 in a leading article on the following day, said it was not to be imagined that there had been any considerable degree of conversion on the subject. The argument stood very much where it had done in 1844, and had, in fact, been almost exhausted in that memorable struggle. The absence of fierce opposition was attributed in a large measure to the fact that the chief argument of the opponents-namely, that the country could not spare the last two hours of industry-could not be brought forward in 1847 without inviting its own refutation, for so great was the depression of trade that the mill owners found it impossible to keep their mills working for so long as ten hours.

¹ The Times, May 4th, 1847.

CHAPTER V.

DIFFICULTIES OF ADMINISTRATION.

The Inspectors and their Duties—Education of Factory Children— The Half Time System—The Relay System—Factory Women— The Act of 1844—Controversies—Senior, Roebuck, Macaulay.

In the latter part of the year 1833 the four newlyappointed factory inspectors started on their duties. These consisted primarily and ostensibly in the enforcement of the law-that is to say, in the prevention and detection of offences against the Act of 1833; but the inspectors also had a very important function to fulfil in supplying the Government in their periodical reports with information as to the condition of the factory population, the degree in which the existing law was likely to remedy the abuses that had been pointed out, and the amendments which they considered would tend to correct its many weaknesses. These reports were to be sent in twice a year to one of the Secretaries of State, or oftener if he desired it. From 1836 to 1844 they were sent in every quarter, but only printed every half-year. Sometimes special reports on particular subjects were made by the inspectors, by order of Parliament or of the Government. With the object of rendering the law as uniform in application as possible, the four inspectors were required to meet twice a year in London and agree on a common plan of action as to their official proceedings and policy, and a joint report of these meetings was to be compiled and forwarded to the Secretary of State along with the single reports. The Government and the public were thus kept informed of what went on in the industrial districts, the manners and customs, state of trade, the possibilities of education and so forth, and this has always formed, and still

forms, a very important part of the inspectors' duties. Defects in the law have probably been much more often caused by ignorance of the real condition of the people than by any deep-set reluctance to improve it; the inspectors' reports have been one of the most effectual means of enlightening that ignorance, and thus constitute an invaluable continuous record of industrial conditions by trained observers, free from local bias and partiality, whose business it was to renew their visits at stated periods and note what changes took place within their view.

The inspectors found themselves charged with the task of bringing regulations made by one class, to bear on another, separated from the first by a gulf of mutual ignorance and distrust. Hitherto that gulf had been bridged only by the philanthropists and by the manufacturers themselves. The philanthropist was apt to be biassed on one side, the manufacturer on another. In the observations of the inspectors we get the point of view of the unemotional professional man, who is not committed either way, and whose work is to enforce the law impartially on all alike and see things as they really are.

The first and perhaps most urgent duty of the inspectors was to see that no children under nine worked in the factories, and that none between nine and thirteen worked more than eight hours a day. Here they were at once met by the formidable difficulty of ascertaining the children's real ages. In some cases the parents did not know; in others, for interested reasons, they pretended that the children were older than they really were. The requirement, under proper safeguards, of birth-certificates would have been the surest remedy, but it was not until 1837 that it was made obligatory to register births in England; the baptismal certificates sometimes produced

¹ The age limit was to rise gradually, and the restriction to thirteen was not in force till 1836. Mr. Poulett Thompson in 1836 tried to lower it again to twelve by an amending Bill, which was passed by so narrow a majority—two—that he preferred to abandon it. Hansard, May 9th, 1836.

were of doubtful value as evidence of age, and the scraps extracted from family Bibles were often obviously altered or forged. The inspectors found it necessary to decline to accept this sort of evidence, and to rely upon sec. 13 of the Act, which required that no child should be employed without a certificate from a surgeon or physician that it was of "the ordinary strength and appearance" of a child of nine years or over. Here again there were difficulties, which are summed up with some naïveté by the Select Committee.1 "The physiological test . . . whereby a medical man may judge from personal inspection the age and capacity of a child for full labour . . . must be subjected to a threefold abatement: first, from the ignorance of some who set up for surgical practitioners; secondly, the dishonesty or negligence of others; and, thirdly, from the defective state of science itself in this particular." It was found that certificates were tendered from cow-doctors, dentists, and various persons by no means qualified for the work.2 Many of the regular surgeons were dependent for their practice on the good-will of mill owners and operatives, and even medical men of good reputation in some cases 8 showed themselves so ready to meet the views of the manufacturers as regards the standard of "strength and appearance" to be expected of a child of nine, that Mr. Rickards, the first inspector for the Manchester district, took upon himself to appoint a certain number of surgeons to be exclusively authorised to give certificates. This arrangement was first made for Manchester only. Lord Melbourne, the then Home Secretary, would not countenance this exercise of the inspector's authority,4 but it was subsequently conceded, and Rickards, meeting with no further opposition, extended the system of appointing certifying surgeons over the whole of his district. His example was followed by Mr. Horner, who was at this time inspector for

H. C., 1841, IX., p. 8.
 H. C., 1840, X., p. 44.
 Ibid., p. 77.
 See Report of Inspectors, 1834, XLIII.

Scotland, and eventually by the other inspectors. But the system was not yet sufficiently safe-guarded. There was a well-known and often practised fraud¹ of sending the older and stronger children to the doctor and passing the younger ones into the factory with the certificates thus obtained. One certificate in this way might serve for a hundred children. In Glasgow a boy was known to have driven a regular trade with age-certificates; he would present himself to one doctor after another, and sell his certificates for a shilling or two. The Manchester inspector therefore advised his certifying surgeons to adopt a system of duplicate forms, and then to visit the factories from time to time and compare the duplicates in their possession with the children working under the certificates issued.

The short day of eight hours for children under thirteen was found much more difficult to enforce than the twelve hours day for young persons between thirteen and eighteen.² Mr. Horner gave evidence before the Committee of 1840⁸ that the "spirit of competition among manufacturers was a check on working over hours at night," but not on the over-work of children, for the simple reason that "the lights in the window will discover the one but not the other." "As far as young persons are concerned, there is that external check; but as regards the young children, the neighbour has no means of knowing whether the young children are overworked or not . . . The children are often worked irregularly." In the same way, to limit

See Weyer, Englische Fabrikinspektion, p. 76.
 Brotherton's speech, Hansard, May 9th, 1836.

³ H. C., 1840, X., p. 15.
⁴ See the remarks on page 2 of Charles Wing's little known and deeply interesting essay, the "Evils of the Factory System," London, 1837. Independent evidence to the same effect occurs in the Report on Combinations of Workmen by a Select Committee of the House of Commons, in Vol. VIII. of 1837—8. It was stated (Q. 1,299) that it was found impossible to procure sufficient numbers of children to work in relays; that (Q. 1,368) the work could not go on without employing children from nine to twelve years old the whole twelve

the number of hours that may be worked per week has generally been found to be an illusory protection; yet so little is this understood, and so little are the historical materials studied, that as lately as the British Association meeting of 1901, ladies appeared in the Economic Section to advocate, in the interest of the workers, the substitution of a weekly for a daily limit.

Mr. Horner considered that the eight hours day for children gave them little protection, prevented their getting instruction, and was impossible to enforce satisfactorily. "The general hours of attendance schools which would be open to factory children," wrote Mr. Howell, "are in the forenoon from nine to twelve, and from two to four or five in the afternoon, and the pupils at such schools have no other daily occupation; it therefore becomes impossible to consider the effects of the educational provisions of the Factories Act without considering also the children's hours of daily employment in the mills. The educational provisions apply only to children employed in cotton, wool, worsted, and flax mills; their hours of work must not begin before 5.30 a.m. or end after 8.30 p.m., nor exceed forty-eight hours in the week, nor nine hours in any one day; the general limit, therefore, of the labour of children between the ages of nine and thirteen employed in the mills above mentioned, may be taken at eight hours daily through the week. . . . But when the full term of eight hours' daily labour in the mill is exacted for the purpose of employing three children working eight hours each upon what is termed the relay

hours—the mill would be stopped; that (Q. 1,320, &c.) there were numerous evasions of the law, and that the masters endeavoured, if possible, to shift the penalty on to the shoulders of the spinner, who usually selected and paid his piecers himself. In consequence of these difficulties, there was a considerable demand for the labour of children old enough to work the full day, and their wages, so it was said (Q. 3,574), had recently risen from 2s. 2d. to 4s. 8d. a week, with the result, as these wages were paid by the spinners themselves, of reducing the spinners' net wages by several shillings a week.

1 Ibid., p. 182.

system, to do the work which would otherwise be performed by two persons working twelve hours each, it will be seen that it is impossible that the children so employed should be able to attend school daily at the hours, either in the forenoon or afternoon, at which ordinary schools are open. . . There are, however, instances in which the full term of eight hours' daily labour is not exacted from the factory children; in such cases the children work only half a day at the mill, and there is then no difficulty whatever in their attending any school in the neighbourhood, even though it should be at some distance from the mill; they who work in the mill in the forenoon have ample time to attend the full school hours in the afternoon, and they who work in the mill in the afternoon have ample time to attend the full school hours in the forenoon. This appears to me to be the most efficient and satisfactory observance of the educational provisions of the Factories Act. The children so attending mix with the children of other classes of the community, and receive instruction not as a class by themselves."i

Mr. Horner also before the Committee of 1840² strongly advocated the employment of children in two distinct sets, one working before the dinner hour and the other after. This system, now generally known as the half-time system, was then often referred to as the "relay system." Mr. Horner said:—"The greatest difficulty we have in checking the number of hours in the day the children work is when they work them at irregular periods; one day they work one hour, and another day another hour, and it is almost impossible to check it." And in his tract "On the Employment of Children in Factories" Mr. Horner says:—"Where they work with relays of three children each working eight hours, instead of two above thirteen, working twelve hours each, and where the system is

¹ Inspectors' Report on the Educational Provisions of the Factory Act, 1839, p. 370.

² H. C., 1840, X., pp. 48—9.

regularly attended to, it does quite well, but in the majority of instances, at present, where they employ children under thirteen, they have no relay; they say that they manage to do without them the remaining four hours." In later times, as will appear hereafter, the "relay system" came to mean this same irregular mode of employment which rendered the legal limitation of hours a farce.

The half-time system was strongly recommended by Horner in his reports 1841 and 1842, in the last mentioned of which he points out the necessity of enforcing it by law, otherwise the greed of the parents and their indifference to their children's interests might impel them—as in a case within his own experience—to withdraw their children from a mill in which "half time" had been introduced in order to give the children the opportunity of attending school, and send them elsewhere to get higher wages.

Besides the difficulty of combining school and factory work, the great obstacle in the way of enforcing school attendance was, of course, the scarcity of schools. Clause 22 of the Act of 1833 had been inoperative, because, though the Act obligingly "authorized" the inspectors to "establish or procure the establishment of such school "(sec. 22), no provision is suggested of means for starting such The educational clauses, although they met schools. with more general approval than any others, and greatly helped to conciliate Liberal opinion, were unfortunately those that were most carelessly drafted and most difficult for the inspectors to enforce. Here and there a mill owner might be a benevolent man and an educational enthusiast, who would follow in Robert Owen's footsteps and himself establish a good school for the children he employed.1 But too often the schools were started in a perfunctory manner, so as just to meet the letter of the law, and the instruction given was of the feeblest kind. Inspector Horner was once offered a school voucher signed

¹ See Report on Educational Provisions of the Factory Act, 1839, p. 5.

with a mark instead of the teacher's name, and on his inviting the schoolmaster to read the document aloud, the latter had to confess his inability to do so. Another time he found the school in the coal-hole, and the stoker alternately feeding the engine fire, and hearing a lesson from books as black as his own coals. Mr. Baker said :-"Factory schools are of many kinds, from the coal-hole of the engine-house to the highest grade of infant educa-The engine man, the slubber, the burler, the bookkeeper, the overlooker, the wife of any of these, the small shopkeeper or the next door neighbour with seven small children on the floor and on her lap, are by turns found 'teaching the young idea how to shoot,' in and about their several places of occupation, for the two hours required by the law." Even if a good National or British school were near the factory the children could often not attend, partly, as already explained, because they were usually at work till the school was closed for the day, partly because the state of their working clothes made them highly undesirable as scholars and companions.

The old-fashioned dame schools offered a merely nominal instruction. The inspectors were at present, therefore, powerless to enforce the law, but they exerted themselves with considerable effect in giving their best advice, help and encouragement to any individual manufacturers who were inclined to help forward the cause of education, and their wide observation enabled them to report experiments from one part of the district to the other. It is worthy of note that the inspectors' experiences on this subject converted them into convinced adherents of the theory of State control of education. Mr. Horner thought it altogether unsound in principle to throw the obligation of providing education upon the mill owner, and advocated a local rate for the purpose. Being asked before the Committee of 1840° whether he did not think this measure

¹ Quoted in Journal of the Statistical Society, 1839, p. 179. ² H. C., 1840, X., p. 116.

would not be opposed by those who received no benefit from such schools, he replied he did not think they would be without benefit. "All the inhabitants of a locality have a clear and direct interest in the moral condition of the working class about them, and would derive benefit from the moral and religious education given in that school." Sir James Graham's Bill of 1843 would have provided educational facilities for factory children, but was opposed by the Dissenters on the ground that too much control was given to the Church, and it was consequently thrown out. Factory legislation, as regards children, was doubtless kept back for generations for want of an effective Education Act, and it is rather interesting to notice the mutual reaction of the two causes; education is made the motive and object of restricting children's hours of work, and then the factory inspectors in their turn become promoters and furtherers of State education, because they realise that only thereby can the restriction become effective.

As regards the labour of young persons, Mr. Horner gave gratifying testimony before the Select Committee of 18401 that in his opinion a large number of mills worked only twelve hours a day and that the law was probably operative in nine-tenths of them. There remained, however, an unfortunate number of irregularities, and these were very difficult for the inspectors to check on account of the elasticity of the legal working day. Young persons might be worked only twelve hours, but they might be worked any time between 5.30 a.m. and 8.30 p.m. times also might be distributed throughout the day at different times for different people. This system went far to annul the Factory Act regulations. As Mr. Howell confesses,² he had supposed, after the passing of the Act of 1833, that the restriction of the labour of young persons

1 Ibid., p. 19.

³ In an interesting report dated December, 1843, XXII. of 1849, in which he gives a *résumé* of the history of the "spurious relay system."

under eighteen to twelve hours a day would be equivalent to a restriction on the motive power, and consequently on the labour of adults; this undoubtedly was the case with fair-minded employers, but unfortunately there was a minority eager to evade the limitation. As the children and young persons could be kept in attendance in or near the mill during the whole of the permitted working day, from 5.30 to 8.30, provided they were sent out for an hour and a half, and had also a like interval for meals, and as their intervals of rest and meal times were left entirely to the master's discretion, it is easy to see how little difficulty there was in keeping within the letter of the law, or appearing to keep within it, whilst entirely breaking it in the spirit. Even if the legal intervals were observed, it meant no more than that a certain number of children and young persons had to do double work while their fellowworkers were out; but obviously it was easy to disregard the intervals, and the inspectors had little chance of discovering or preventing any offence except that of working over hours at night. Moreover, the hour off, even when honestly given, was of little advantage to those who were sent out, especially if they lived at a distance from the mill. The term "relay system" did not really mean, as the word misleadingly suggested, a system of shifts, one set of workers taking the place of another, as in the half-time system, which was introduced in 1844; the "spurious relay system," invented by the disloyal manufacturers after 1833, involved a complicated plan, or combination of plans, for shuffling the workers and shifting the hours of rest and meal times so that there might never be a complete set of hands working together in the same room at the same time; the inspector might easily be told on his visit that so-and-so was resting and so-and-so dining or breakfasting, and yet have very good reasons for doubting that each individual child and young person were allowed the legal intervals. The law-abiding manufacturers petitioned Parliament to be protected from the

immoral competition of their fellows.¹ The inspectors made frequent representations in their reports of the difficulty they had in enforcing the law, and of the evils inflicted on young workers by so prolonged an attendance at the mills. Mr. Horner made it a recommendation that young persons and children should be prohibited from being employed in or about the factory more than thirteen and a half hours (working hours plus meal times) reckoned from the time that any young person began work in the morning.2 As we shall see, this regulation found a place in the Act of 1844, and was a material aid in making administration effective. There are many persons at the present day who are disposed to regard the regulations relating to meal times and period of employment with a certain good-humoured scorn, as the vexatious meddling of petty-minded legislators and officials; it is right, therefore, to point out that these apparently trivial restrictions were not invented in a spirit of captious interference, but were literally forced upon the State, as a necessary part of the protection of young workers from the exploitation of unscrupulous employers.

In the spring of 1842 the first Report of the Children's Employment Commission, on Mines and Collieries, appeared. It does not fall within our limits to treat of the Mines Acts in detail. Mining industry is carried on under such different conditions, and is necessarily organised so differently from factory labour, that it demands separate treatment. But we have to note here that legislative control of a very drastic nature for women in mines was demanded and granted, before even the least restriction of factory women's hours had been attempted. publication of the report made a terrible impression, which was not allowed to fade away without results. shown that women were universally employed underground in West Yorkshire and North Lancashire; that

¹ Capital, by K. Marx, translation, p. 267.
² Report for December, 1840.

it was a common practice at "Bradford and Leeds, in Cheshire, Lancashire, and South Wales; general in the East of Scotland, rare in the West"; and unknown in Staffordshire, Shropshire, Warwickshire, Leicestershire, Derbyshire, Cumberland, Durham, Northumberland, Gloucester and Somerset, and the whole of Ireland.

The sufferings and exhaustion endured by the women are described in the report, and the details cannot even now be read without pain and shame. It has often been told how from an early age they were employed in dragging trucks of coal to which they were harnessed by a chain and girdle, going on all-fours, in conditions of dirt, heat, and indecency which are scarcely printable. The demoralization resulting from such work and its inevitable results on the offspring of women living and toiling in such circumstances were shown in the report, and drove home the conclusion that society must interfere in such cases, or stand idly by to watch the gradual decay and degeneration of the mining population.

Lord Ashley's Bill struck at the root of the matter, and excluded women of all ages—as well as young children of both sexes—from the mines. This is, perhaps, the most high-handed interference with industry enacted by the State in the nineteenth century, and it doubtless led the way to the inclusion of women in the much milder Factory Bill of 1844. The restrictions placed on the employment of children and young persons had caused women to be employed in greater numbers, their labour being cheaper than that of men.¹ It is quite likely that trade union jealousy brought some influence to bear, and the Yorkshire Short Time Committees certainly advocated very drastic measures of reform, such as limiting the proportion of women to men in factories, forbidding married women to work, and so on.² But the Commis-

¹ See Sir Charles Shaw's "Replies to Lord Ashley," p. 26. ² See above, p. 65, and *Manchester and Salford Advertiser*, January 13th, 1842. sion of 1843, without being biassed by the considerations that might possibly influence trade unions, had brought to light terrible facts of the long hours and miserable conditions characteristic of women's labour.

Another influence that evidently had its share in this, as in most other developments of factory law, was the resentment of the law-abiding manufacturers against what they considered the "unfair" competition of those who worked over hours. Sir James Graham, speaking in the House May 3rd, 1844, made a curious admission that the Act of 1833 was in fact intended to be of general operation, though ostensibly applying only to persons under eighteen. "The Legislature had already come to the conclusion that twelve hours was a sufficient period. It enacted directly that children and young persons should not be worked beyond that limit, and when it did so it indirectly fixed the principle that twelve hours ought to be the general limit to the worker of machinery. But that rule was in a manner broken by the instrumentality of female adult labour. . . . The restriction which had already been imposed upon the labour of children and young persons had driven those who sought to evade the law in working machinery for more than twelve hours, to avail themselves of the lower-paid labour of females in order to work beyond the limited time." Considering that the restriction imposed by "the law" had hitherto been studiously applied only to those under eighteen, the usual assumption being that Factory Acts were intended only to protect those who by reason of their youth could not be deemed "free agents," it was a somewhat odd position for one of H. M. Ministers to take up that working over hours with adult operatives was "evading the law."

The inclusion of women was violently opposed by Mr. Roebuck, on the ground that factory women were on the whole better off than those employed in other kinds of industry, particularly in agriculture. No justification for

this optimistic incredulity was to be found in the inspectors' reports. In 1843 the inspectors had drawn attention to the extreme overwork to which women were subjected in factories, sometimes from 5 a.m. to 8.30 p.m. Mr. Horner pointed out in his report for October, 1843, that "there is a great deal of illegal over-working; that is, that many under eighteen years of age are worked more than twelve hours a day. In many mills they avowedly work more than twelve hours, turning out all under eighteen, a sufficient number above that age remaining to work part of the machinery; but in many mills the precaution of not allowing any under eighteen to remain is too often imperfectly attended to, or entirely omitted, unless when the inspecting officer is known to be near at hand. . . . A theorist may say that these people (women just over eighteen) are old enough to take care of themselves; but practically there can be no such thing as freedom of labour, when from the redundancy of population there is such competition for employment. Twelve hours' daily work is more than enough for anyone; but however desirable it might be that excessive working should be prevented, there are great difficulties in the way of legislative interference with the labour of adult men. The case, however, is very different as respects women; for not only are they much less free agents, but they are physically incapable of bearing a continuance of work for the same length of time as men, and a deterioration of their health is attended with far more injurious consequences to society." 1

Another matter that probably helped to bring the condition of women workers before the Government was

¹ It is curious to note the different attempts that were made to secure a measure of protection for women. The Bill of 1841 proposed to include all under 21, whether men or women, as young persons within the meaning of the Act; the Bill of 1843 proposed to leave male young persons as they were, but to include all female young persons under 21; the Bill finally passed in 1844 included all women over eighteen under the same regulations as those for young persons.

the question of fencing machinery. The inspectors had become cognizant of the terrible accidents that occurred in the mills, and pointed out before the Committee of 1840 that the customary dress of girls and women made them especially liable to be caught by the machinery, and perhaps killed or seriously injured. The Committee drew up some recommendations which were substantially embodied in the Act of 1844.

We are now in a position to consider this Act,¹ and it is remarkable to notice how much it owes to the inspectors' advice and initiation, the most important sections being due to their suggestion.

Women were now included (sec. 32) under the same regulations as young persons.

Machinery was to be safeguarded much on the lines the inspectors had recommended; no child, young person, or woman was now allowed to clean it whilst in motion (sec. 20). And "every fly-wheel directly connected with the steam engine or water-wheel or other mechanical power, whether in the engine-house or not, and every part of a steam engine and water-wheel, and every hoist or teagle, near to which children or young persons are liable to pass or be employed, and all parts of the mill-gearing in a factory" was to be securely fenced (sec. 21).

Although the hours of work and the working day were unaltered from the Act of 1833, the twelve hours' work between 5.30 a.m. and 8.30 p.m. being still permitted, there were several subsidiary regulations which show that the inspectors' minute and careful study of industrial conditions was beginning to take effect. The half-time system for children was enacted (secs. 30, 31); but, as a set-off, children of eight might now be employed (sec. 29).

The Act required that the twelve hours working day must be held to begin from the time that any protected person started working in the morning (sec. 26);

that no protected person must remain in the work-room during meal times (sec. 36); and the meal times of all young persons and women must take place at one time.

The hours of work and meals were to be regulated by some public clock, to be approved by the inspectors (sec. 26). These regulations amounted to a recognition, if a tardy one, of the need for defining as well as limiting the working day, and they made the inspectors' work much more practicable. The making up of lost time was also placed under stricter control (secs. 33, 34).

Some important alterations were also made in the method of administration. The jurisdiction of a magistrate (sec. 2), which had proved an embarrassment to the inspectors in the exercise of their own proper functions, was now withdrawn. They also lost the power of making rules and regulations on their own authority, this being transferred to the Secretary of State (sec. 6). The inspectors were, however, strengthened in their office in several ways; the superintendents, who were from this time styled "subinspectors" (sec. 2), had now the power (sec. 3) to enter and inspect factories and factory schools, for want of which they had been much hindered; the inspectors were given legal power to appoint certifying surgeons (sec. 8), and to disqualify schoolmasters whom they considered incompetent (sec. 39); notice was to be sent to them of the opening or occupation of a factory (sec. 7). Two magistrates were now required for hearing complaints, instead of one, as before (sec. 45), neither a factory occupier nor his father, brother or son might sit to hear complaints (sec. 71), and complaints could be made within two months of the offence instead of fourteen days (sec. 44). The fines were increased (sec. 56). This was a necessary measure, as, owing to the large powers granted to magistrates to mitigate penalties and their alacrity to do so, it was often more profitable to overwork children and pay the penalty than to observe the law. The conventional

fine was well known in the Rochdale district as the "sovereign remedy."1

Section 27 required a register to be kept of the children and young persons employed in the factory, and empowered the inspector to demand any extracts or information from the register that he might require.

Section 28 required an abstract of the amended Act to be hung up in the factory so as to be easily read, and to contain names and addresses of the inspector and sub-inspector of the district, the certifying surgeon, the times for beginning and ending work, the amount of time and time of day for meals, time lost and time recovered, and other particulars.

The period between 1829 and 1844 is that of the most violent and bitter controversy over the Factory Acts, which was intensified by the simultaneous struggle over the repeal of the Corn Laws. Although the singleness of purpose of such leaders as Sadler and Lord Ashley is of course absolutely above suspicion, it is probable that many of their followers were only too pleased to vote for "Ten Hours" as a means of putting a spoke in the manufacturers' wheel, and taunts were levelled from both sides at the readiness of hon. members to benefit the working classes at other people's expense.2 It must be remembered, however, that the division of opinion was by no means strictly a party one,3 and the exigencies of work on party lines brings it about that we find Sir Robert Peel, for instance, defending the principle of regulating women's labour,4 though he had bitterly attacked Lord Ashley's amendment for making regulation worth having and a reality only two months before.5 Without going into the many side issues raised, it may be said that the line of

Report Select Committee, 1841, IX., p. 18.
 Morley's "Life of Cobden," II., 300.
 See passage in Greville's "Memoirs," quoted in Chap. IV., p. 68.

⁴ See Hansard, May 3rd, 1844, col. 658. ⁵ *Ibid.*, March 18th, 1844, col. 1,241, &c.

opposition of this period has little to do with abstract ideas of individual freedom or the philosophic doctrine of laissez-faire, but resolves itself for the most part into what we may term the optimistic argument, asserting the alleged overwork to be grossly exaggerated, and the commercial, which went to show that the manufacturing interest could not stand the strain that would be put upon it by the proposed restriction to ten hours. Both these arguments are already old friends, but they received in this period, at the hands of Nassau Senior, a daring and uncompromising treatment that merits some special consideration. In his once celebrated "Letter on the Factory Acts" he wrote thus:—"The following analysis will show that in a mill so worked" (i.e., on the plan of twelve hours a day and nine on Saturday, laid down by the Act of 1833) "the whole profit is derived from the last hour. I will suppose a manufacturer to invest £100,000—£80,000 in his mill and machinery and £20,000 in raw material and wages. The annual return of that mill, supposing the capital to be turned once a year and gross profits to be 15 per cent., ought to be goods worth £115,000, produced by the constant conversion and re-conversion of the £20,000 circulating capital from money into goods and from goods into money in periods of rather more than two months. Of this £115,000 each of the twenty-three halfhours of work produces $\frac{5}{115}$ ths of $\frac{1}{23}$ rd. Of these twentythree twenty-thirds (constituting the whole £115,000), twenty, that is to say £100,000, out of the £115,000 simply replace the capital; \(\frac{1}{23}\)\rd (or \(\frac{1}{5}\),000) out of the \(\frac{1}{115}\),000 makes up for the deterioration of the mill and the machinery. The remaining 23rds, the last two of the twenty-three half-hours of every day, produce the net profit of 10 per cent. If, therefore (prices remaining the same), the factory could be kept at work thirteen hours instead of eleven and a half, by an addition of about £2,600 to the circulating capital, the net profit would be more than doubled. On the other hand, if the hours of

working were reduced by one hour per day (prices remaining the same), net profit would be destroyed; if they were reduced by an hour and a half, even gross profit would be destroyed. The circulating capital would be replaced, but there would be no fund to compensate the progressive deterioration of the fixed capital."

This statement of Senior's was introduced into the debate on Lord Ashley's amendment in favour of "Ten Hours" in 1844¹ by Mr. Milner Gibson, who, while approving of the restriction of women and young persons to twelve hours, thought that any further limitation would operate as a restriction on the motive power and on the labour of male adults, and would constitute "an interference with the only property they had to dispose of—namely, their labour." He thought Senior's principle "sound," and said that, "by the depreciation of manufactures, the greatest possible injury would be inflicted upon the operatives."

This speech attracted some attention, and was criticised in the daily and weekly Press. It was pointed out that "no one but a mill owner or Mr. Senior" was unreasonable enough to expect his capital to be returned in one year, a construction which it is incredible Senior could have intended, but was - it must be owned - a perfectly fair inference from his wording. Another absurdity was shown to be contained in Senior's assumption that the same outlay in raw material, &c., would be necessary, although on his hypothesis a smaller quantity would be produced. The Spectator, in a long and interesting article, contended that the loss through shorter hours, if loss there were, might fall on profits, and yet competition might prevent a reduction of output, or, on the other hand, price might be enhanced one-sixth, and consumers would have to pay more or consume lessan "evil" which "does not appear excessive" considered as "the purchase money of two hours leisure per day for

¹ Hansard, March 15th, 1844, col. 1,110.

the whole slaving population of our cotton manufacture," and likely to be compensated for by the progress of mechanical improvements.1

More interesting, perhaps, than any of these, because written in closer contact with facts, were the remarks of Mr. Kennedy in his report on calico printing, which will be considered below.2

Senior also opposed the Ten Hours Bill on the ground that the work of children and young persons in the cotton mills was so light-"mere confinement, attention, and attendance," as he put it—that it was perfectly possible, not to say desirable, for them to work "extremely long hours." Edward Baines insisted on the same point. "It is," he said, "scarcely possible for any employment to be lighter."3 But he rather damaged the force of this assertion by explaining that "the only thing which makes factory labour trying, even to delicate children, is, that they are confined for long hours and deprived of fresh air; this makes them pale and reduces their vigour, but it rarely brings on disease." 4 It was very usual also to argue against any attempt to regulate factory labour by pleading that worse abuses existed in other industries. This was the burden of Mr. Bright's speech on March 15th, and of Sir Robert Peel's on March 18th, 1844. The latter went so far in his descriptions of the miseries

² Chapter VII., p. 125.
³ History of the Cotton Manufacture, p. 456.

¹ The Times, March 26th and 29th, 1844; Spectator, March 23rd,

⁴ Baines' description of the prosperous operative illustrates the Philistine ideals of his time with such unconscious humour that we cannot forbear quoting it, although it is not strictly relevant to the question of regulation. "Where a spinner is assisted by his own children in the mill," he says on p. 446, "his income is so large that he can live more generously and clothe himself and his family better than many of the lower class of tradesmen, and though improvidence and misconduct too often ruin the happiness of these families, yet there are thousands of spinners in the cotton districts who eat meat every day, wear broadcloth on the Sunday, dress their wives and children well, furnish their houses with mahogany and carpets, subscribe to publications, and pass through life with much of humble respectability."

undergone in unregulated industries that the sympathies of the House were enlisted in the direction opposite to that intended by the speaker. He had described so vividly and painfully the sufferings and long hours of work undergone by women and children in earthenware making, block printing, the metal trades and other industries, which all, as he stated, involved worse conditions than cotton. that his final appeal came as an anti-climax. "Is it right," he asked, "to deal only with this one branch of industry and leave others altogether untouched, in which it appears that female children work fourteen, fifteen, or sixteen, or even as much as eighteen hours a day?" He apparently supposed that hon, members would accept this as a reductio ad absurdum of regulation of textiles, whereupon the House turned upon him and greeted the ironical query "If you are prepared to legislate for them" with loud cries of "Hear, hear!" Nevertheless, the arguments which had in March so entirely convinced Sir Robert Peel that State interference was unjustifiable in the case of Lord Ashley's amendment for ten hours, did not, in the May following, prevent his defending Sir James Graham's Bill for restricting women's labour to twelve, and it is not surprising that Lord John Russell, who, though a Whig, supported the Ten Hours movement at the cost of offending his family and party,1 used this singular inconsistency against him with considerable effect. Sir Robert Peel's arguments were as valid against a twelve hours, as against a ten hours Act.

Nor was this the only case of inconsistency. In June, 1838, Mr. Roebuck wrote to his wife from Glasgow that he had been to see a cotton-mill—"a sight that froze my blood. The place was full of women, young, all of them, some large with child, and obliged to stand twelve hours each day. Their hours are from five in the morning to seven in the evening, two hours of that being for rest, so that they stand twelve clear

¹ Life of Lord John Russell, Vol. I., p. 415.

hours. The heat was excessive in some of the rooms, the stink pestiferous, and in all an atmosphere of cotton flue. I nearly fainted." Yet on May 3rd, 1844, this same Mr. Roebuck, moving a resolution that the House would sanction "no interference with the power of adult labourers in factories to make contracts respecting the hours for which they shall be employed," brought up the old optimistic arguments that the miseries of factory labour were exaggerated, that factory labour was neither laborious nor ill-paid, and, having apparently entirely forgotten his visit to Glasgow only six years before, said passionately, "It won't do to come down to this House with exaggerated descriptions of misery, of want and of suffering. I deny them all ('Oh, Oh!')." In 1860 the same speaker joined Lord Shaftesbury in promoting a Bill for regulating bleaching and dye-works, retracted his opposition, and made a speech on the subject 2 which his biographer describes as "one of the most marvellous triumphs of rhetoric ever achieved within those walls."

The fact would seem to be that there was really no very definite cleavage on the abstract question of State interference with industry. Each side would occasionally find it convenient to use a few stock phrases about "freedom of labour," or "violating the principle of leaving each individual free to make his own contract"; each side would generally object to the regulations proposed by the other, but it is notable that there was never any real retreat from the principle affirmed by the Act of 1819. Such objections as were raised to later Acts were objections to the particular extension, or the particular measure that was in question at the moment, and the opponents of the measure would gravely use the old laissez-faire phrases, and perhaps really fancy that they meant them to be taken seriously. Half an hour afterwards they might be found defending the twelve

Life of Roebuck, by R. E. Leader, p. 117; see also pp. 119, 120.
 Hansard, March 21st, 1860.

hours day with arguments that were logically destructive of their previous reasoning. Nor can it be denied that some of the arguments used by Sadler and Lord Ashley were equally open to the charge of proving too much. From some of the attacks made on the demoralising nature of the factory industry, it would have logically followed that not only children but women should be entirely excluded from it, in the interests of family life and well-being.

Here and there, however, a note is struck which suggests that the factory reformers were working out the philosophy of the matter, and among much dreary and more or less irrelevant verbiage we occasionally find the real issues set forth in such a direct statement as:-"The State has an interest and a right to watch over and provide for the moral and physical wellbeing of her people."1 Lord Howick, again, made a valuable and illuminating speech on May 3rd in the same year. He agreed with Adam Smith that restrictions upon the freedom of industry, if intended to increase the wealth of a particular class, are unjust — if that of the whole community, are impolitic and miss their aim; "but I contend that you altogether misapply the maxim of leaving industry to itself when you use it as an argument against regulations of which the object is, not to increase the productive power of the country, or to take the fruits of a man's labour from himself and give it to another, but, on the contrary, to guard the labourer himself and the community from evils against which the mere pursuit of wealth affords us no security. . . . There is an important distinction which has not been sufficiently adverted to in these debates, between restrictions imposed upon industry with the visionary hope of increasing a nation's wealth, or with the unjust design of taxing one class for the benefit of another, and those of which the aim is to guard against evils, moral or physical, which it is appre-

¹ Lord Ashley, see Hansard, March 15th, 1844.

hended that the absence of such precautions might

entail upon the people."

In May, 1846, Macaulay himself, in an extraordinarily fine speech, 1 triumphantly demonstrated that "where health is concerned, and where morality is concerned, the State is justified in interfering with the contracts of individuals," and appealed to the experience of the Acts already in force, to prove that the results of shortening hours by law were beneficent rather than disastrous. "I do not mean to say that a man will not produce more in a week by working seven days than by working six days. But I very much doubt whether, at the end of a year, he will generally have produced more by working seven days a week than by working six days a week; and I firmly believe that at the end of twenty years he will have produced much less by working seven days a week than by working six days a week. In the same manner I do not deny that a factory child will produce more, in a single day, by working twelve hours than by working ten, and by working fifteen hours than by working twelve. But I do deny that a great society in which children work fifteen or even twelve hours a day will, in the lifetime of a generation, produce as much as if those children had worked less. . . . Rely on it, that intense labour, beginning too early in life, continued too long every day, stunting the growth of the mind, leaving no time for healthful exercise, no time for intellectual culture, must impair all those high qualities which have made our country great. Your overworked boys will become a feeble and ignoble race of men, the parents of a more feeble progeny: nor will it be long before the deterioration of the labourer will injuriously affect those very interests to which his physical and moral energies have been sacrificed. . . . Never will I believe that what makes a population stronger, and healthier,

¹ Works, Vol. VIII., p. 360.

and wiser, and better, can ultimately make it poorer. . . . If ever we are forced to yield the foremost place among commercial nations we shall yield it to some people pre-eminently vigorous in body and mind."

In 1847 the Ten Hours agitation, which has been described in the previous chapter, found a successful conclusion in the passing of the Ten Hours Act.1 The second reading was carried by a majority of 108, the third by a majority of 63, and the Bill also passed the House of Lords.2 The minority were as convinced as ever that theirs was the only righteous cause, and the imminence of their defeat did not prevent Joseph Hume, John Bright, Roebuck, and others, from making impassioned harangues on the peril of interference with manufacturers' profits.3 A more modern note of opposition is found in one speech, that of Viscount Ebrington, the present Earl Fortescue, who upheld the economic advantage of shorter hours, while strongly disapproving of State interference with the labour of adults, whether men or women. He considered that the demand of the operatives for shorter hours was defensible, and even imperative. on economical grounds, and he quoted cases, evidently taken from the Children's Employment Commission,4 in which an increase in the hours of work had resulted in positive loss. Nevertheless, so strong were his objections to State interference that, in his opinion, Factory Law ought only to apply to boys until fourteen, and to girls a little longer. It is unusual at that time to find an opponent of State interference appreciating the economy of short hours, and basing his opposition, not on commercial, but on individualist grounds. At present the two positions might probably often be found combined.

 ^{1 10 &}amp; 11 Vict., c. 29.
 2 Life of the 7th Earl of Shaftesbury, Vol. II., pp. 190—3.
 3 Hansard, February 10th and 17th, 1847.

⁴ See below, Chapter VII.

CHAPTER VI.

THE INTRODUCTION OF A NORMAL DAY.

Administration of the Ten Hours Act—The False Relay System—Act of 1850—Establishment of a "Normal Day" for Women and Young Persons—Agitation for a Restriction on the Motive Power of Machinery—Act of 1853—Extension of the "Normal Day" to Children—The Fencing of Horizontal Shafts—Opposition of Manufacturers — Formation of "National Association of Factory Occupiers."—Factory Act of 1856.

During the period from 1847 to 1860 no great extension of the principles of factory legislation took place. The period is marked by only two Acts of importance-namely, those of 1850 and 1853, which established for the first time a definite normal working day for women, young persons, and children. No new principle was involved in these Acts. They were due to the discovery that the regulations as to hours could not be enforced without such a provision, and they show the need of drafting Acts of Parliament in language so definite that no misunderstanding can arise. But the period derives great interest from two movements; one amongst the working men, who agitated for a restriction on the moving-power of machinery, as the only means of enforcing the regulations as to hours, and another amongst the masters, against what they called "meddling legislation."

When the Ten Hours Bill of 1847 actually became law the greatest rejoicing took place all over the country, especially amongst those members of the Short Time Committees, who for the last thirty years had been working for what they now looked upon as an accomplished fact. We read that on May 22nd, 1847, a meeting of delegates

¹ This expression here, as in Chapter IV., means always a restriction on the number of hours during which machinery might be worked.

from Short Time Committees was held in London, and the following resolution was passed :- "That we are deeply grateful to Almighty God for the success which has heretofore attended our efforts, and now that the object of our labours for the last thirty years is about to be brought to a happy consummation we pledge ourselves to promote by every means in our power those religious and social blessings which it has been the object of the Bill to extend to the factory workers." In June, 1847, after the Bill had become law, the rejoicings throughout the manufacturing districts were such as had never been known before. Demonstrations to celebrate the passing of the Act were held in almost every town in Lancashire and Yorkshire, and meetings were called together by the members of the Short Time Committees, congratulating the working classes on the success of their labours, and urging them to make good use of the extra time which would now be afforded to them.3

It was some time before it was possible to tell what would be the effect of the reduction of hours, for the year 1847 was marked by a great depression of trade. Moreover, the Ten Hours Act only came into operation gradually. The hours were first reduced to eleven, and the ten hours limit was not to come into force until May, 1848.

The extent of the depression of trade may be gathered from the fact that in March, 1847, out of a total of 179 mills in Manchester only 92 were working full time, 68 short time, and 17 were closed. Out of a total of 41,000 hands employed in these mills 22,000, or about 50 per cent., were working full time, 13,500 were working short time, and 5,500 were stopped. The average number of working hours per day in Manchester was reduced to seven, and in the surrounding districts to eight hours.³

¹ Halifax Guardian, May 22nd, 1847.

² See, e.g., accounts of meetings in *Halifax Guardian*, June 5th and 19th, 1847, and *Manchester Guardian*, June 5th, 1847.

³ See *Halifax Guardian*, March 6th, 1847. At a meeting of delegate spinners held on October 3rd, 1847, it was stated that the number of

The operative cotton spinners of Lancashire advocated the temporary closing of the cotton mills as the only method of restoring the balance of trade, but the masters refused to consider this, and in Mossley they proposed a reduction of 10 per cent. in wages.2

This example was followed by the manufacturers of other districts. Public meetings of the operatives were organised for the purpose of protesting against the reduction, and it was proposed that there should be a general strike; but several of the delegates were reluctant to adopt such an extreme measure. The spinners in the neighbourhood of Ashton and Dukinfield³ did come out on strike; but in a month they were obliged to return to work on the terms offered by the masters.4 It must be noticed that the reduction was due, not to the Ten Hours Act, but to the depression in trade, and if there were any doubt about this, it would be dispelled by the fact that after the Ashton men returned to work at the reduced rate, their hours were only seven a day, and the masters stated that "when trade revived they would have no objection to put on the 10 per cent. again." 6 In Warrington the manufacturers had promised that if the men would consent to a reduction, the mills should be worked full time. The men

mills which had stopped working was as follows:-Ashton-under-Lyne 16, Bolton 90, Belmont 38, Bosden 18, Chorley 72, Cuerden and Walton 190, Heywood 27, Leeds 12, Manchester 300, Mossley 142, Oldham 26, Leddleworth 24, Shaw Chapel 37, Sansbury 30, Tyldsley 11, Waterhead Mill 40, Withnal 50, Warrington 70, Bury 51. It was stated also that in Preston and Blackburn upwards of 20 mills had entirely stopped working. Manchester Courier, October 6th, 1847. See also "Eight Hours Day and the Unemployed," by J. Rae, in

Contemporary Review, 1893.

1 See Halifax Guardian, September 11th, 1847.

2 Ibid., September 18th and October 9th, 1847, and Manchester Courier, September 22nd, 1847.

3 See Manchester Courier, October 23rd, 1847.

4 Ibid., December 1st, 1847.

⁵ For a discussion on the effects of the Ten Hours Act on wages, see "Factory Legislation Considered with Reference to the Wages of the Operatives Protected Thereby," by Geo. H. Wood; read before the Royal Statistical Society, April 15th, 1902. See also infra, Appendix A.

⁶ See Manchester Courier, November 24th, 1847.

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did agree, but shortly afterwards the mills were closed altogether.¹ The manufacturers took advantage of the desperate condition of the workmen to get up an agitation for preventing the Ten Hours Act from coming into full force.

Lord Ashley, in a letter to the Lancashire Short Time Committees,² warned the operatives of the movement which was being set on foot, and advised them not to move from their present position "by a hair's breadth." Instructions were forthwith sent to every local committee in England, Scotland, and Ireland to meet and reorganise its forces, and to communicate with the operatives in each district with a view to resisting any attempt that might be made for preventing the Ten Hours Act from coming into full operation. At such a time of depression, after two years' suffering among the factory operatives, in consequence of the terrible crisis of 1846-7, a considerable number of them were in great destitution, and it would have been only natural that, when trade revived, many would be anxious to work longer time, in order to make up for past losses. But on the whole they remained firm. Petitions in favour of the repeal of the Ten Hours Act were sent in, but the petitioners themselves afterwards declared under oral examination that they had been forced to sign them on pain of dismissal.

In order to test the general feeling Leonard Horner, one of the inspectors, examined 10,270 adult male labourers in ten factories as to their views on the question, and of these 70 per cent. declared in favour of a ten hours day, even though it might involve a reduction in wages.³ The manufacturers failed in their attempt to overthrow the Ten Hours Act, and it came into full operation on May 21st, 1848.

The Halifax Guardian stated that "the change . . . came noiselessly and unnoticed by any but those

1 Ibid., September 15th, 1847.

8 See Appendix to Report of Inspectors of Factories, Parliamentary

Papers, 1849, Vol. XXII., p. 147.

² See *Halifax Guardian*, December 24th, 1847; also "Capital," by Karl Marx, English translation, p. 270.

immediately concerned. In fact, Nature has anticipated the Legislature, and, instead of finding the Act of Parliament a burden and an evil, the manufacturers would be only too glad to be able to run their mills for the full time allowed by law."1

The reports of the factory inspectors tell the same tale. In June, 1848, Mr. Horner reported that:-" As many mills have been already closed, and a large proportion have shortened their time of working several hours a day, in many cases to half-time; the operation of the restriction of the labour of young persons and women to ten hours a day . . . has been very partially felt."2

But already in 1847 we find the inspectors complaining of indications of a disposition among some manufacturers to resort to plans for evading the law, and to keep their machinery working for more than ten hours a day. This was a comparatively easy matter, owing to the fact that the Factory Acts of 1833, 1844, and 1847 were all three in force, so far as the one did not amend the other: that not one of these limited the working day of the male workers over eighteen, and that since 1833, although the legal hours of work for young persons and women had been reduced from twelve to ten hours, no corresponding reduction had been made in the duration of the legal working day, which still extended from 5.30 a.m. to 8.30 p.m.

Thus the employers who now wished to keep their machinery working for longer than ten hours could do so by supplying the men with helpers by means of shifts and relays of women and young persons.3 This device was

¹ Halifax Guardian, May 6th, 1848.

² Report of Inspectors of Factories, Parliamentary Papers, 1847—8,

Vol. XXVI., p. 151.

³ Mr. Horner stated in 1849, that in his district 114 mills were working young persons and women by shifts. "In general the time of working is extended to thirteen and a half hours, from 6 a.m. to 7.30 p.m., with an hour and a half off for meals; but in some instances it amounts to fifteen hours, from 5.30 a.m. to 8.30 p.m., with the same allowance for meals." Report of Inspectors of Factories, 1849, Vol. XXII., p. 287.

no new one. It had been largely practised under the Act of 1833, which had restricted the labours of children to nine hours, and that of young persons to twelve hours, a day, but had allowed the period of employment to be taken any time within a limit of fifteen hours. inspectors had complained of the impossibility of detecting overtime employment under such a system, and when in 1844 a Bill had been brought in to amend the numerous imperfections of the Act of 1833, no amendment had been more urgently pressed upon the attention of the Government than that greater security should be provided against overtime employment. It was thought that this end would be accomplished by sec. 26, which enacted that the hours of work of all protected persons "shall be reckoned from the time when any child or young person shall first begin to work in the morning in such factory." This answered the purpose until 1847, but when the Ten Hours Act came into force it was discovered by the employers that the Act of 1844 was "not so stringent in the wording as to preclude altogether the employment of relays"2; and even in spite of the depression of trade, the system was reintroduced in a certain number of mills as early as 1847.

To realise the evils of the relay system we may quote from Mr. Howell's report:—"The system which they seek to introduce under the guise of relays is some one of the many for shuffling the hands about in endless variety, and shifting the hours of work and of rest for different individuals throughout the day, so that you may never have one complete set of hands working together in the same room at the same time."3

Karl Marx compares the operatives under the relay system to the actors on a stage, and says that, "as on the stage, the same person had to appear in turns in the different scenes of different acts. But as an actor, during

See supra, Chapter V., p. 80.
 See Lord Ashley's speech, Hansard, 3 S., Vol. CIX., p. 884.
 Report of Inspectors of Factories, Parliamentary Papers, 1849, Vol. XXII., p. 225.

the whole course of the play, belongs to the stage, so the operatives, during fifteen hours, belonged to the factory. without reckoning the time for going and coming. Thus the hours of rest were turned into hours of enforced idleness, which drove the youths to the pot-house and the girls to the brothel."1

A correspondent from Stalybridge, writing to Lord Ashley in 1850, thus speaks of the relay system :- "I have been to-day to see some factories where the so-called relay system is in full work, and have seen such evidence of the evils of that mode of working the people that I cannot refrain from pouring out my feelings to you. In one factory I found three hundred and thirty-five young persons and women working by relays: they are sent out at different times of the day, so as to bring their actual working to ten hours. They are sent out of the mill without any regard to the distance of their homes or the state of the weather. Some of them, I ascertained, lived two miles off, and then the half-hour, or one hour, or two hours can be turned to no good account. . . . One manager said that 'the factory law has never worked so oppressively to the operatives' as it does now."2

Under such a system the Ten Hours Act was completely nullified, and it was impossible for the inspectors to detect overtime employment. The inspectors all agreed that, according to the strict letter of the law, relays were illegal, but, owing to the different interpretations of the law given by magistrates in cases brought up for trial,3 an appeal was made to the Law Officers of the Crown, who reported that they agreed with the inspectors in pronouncing the

relay system to be illegal.4

1 "Capital," by Karl Marx, English translation, p. 277.
2 Hansard, 3 S., Vol. CIX., p. 886, March 14th, 1850.
3 See Report of Inspectors of Factories, Parliamentary Papers, 1847—8, Vol. XXV., p. 245.
4 See letter from Mr. (afterward Sir George) Cornewall Lewis to the

Inspectors of Factories, Parliamentary Papers, 1847-8, Vol. LI., p. 244.

In spite of this opinion, many of the magistrates still refused to convict for this offence, on the ground that sec. 26 of the Act of 1844 was loosely worded and would not bear the strong construction put upon it.

The Home Secretary was so overwhelmed with petitions from the employers, that, in a circular of August 5th, 1848. he recommended the inspectors "not to lay informations against mill owners for a breach of the letter of the Act, or for employment of young persons by relays, in cases in which there is no reason to believe that such young persons have been actually employed for a longer period than that sanctioned by law."1 The English inspectors declared that the Home Secretary had no power dictatorially to suspend the law, and they continued their legal proceedings against manufacturers who introduced the relay system.

The two inspectors in the East and South of England were generally supported by the justices, but in the important circuit of Manchester Leonard Horner met with great opposition in his determined attempt to enforce the law. He held a difficult post, as he was bitterly reproached by the masters who worked with relays, for taking proceedings against them, and he found it impossible to enforce the law throughout his district, owing to the fact that the magistrates did not support him. The bench was often occupied by employers, who simply dismissed the inspector's complaint without even taking the trouble to justify their decision. In one case Horner reported that "in consequence of a case being dismissed three times . . . all the factories within the magisterial division in which Mr. Greene acts may work by relays of young persons and women without my having the power to prevent them."2 On the other hand, as the relay system spread in Lancashire, Horner was accused

Parliamentary Papers, 1849, Vol. XXII., p. 134.
 Report of Inspectors of Factories, Parliamentary Papers, 1849, Vol. XXII., p. 143.

of tolerating it by the masters who kept within the legal limits, and they complained that it was impossible for them to compete with other employers who kept their machinery working for a longer time by means of relays.

James Stuart, the inspector for Scotland, was the only one who refused to concur with the other inspectors in their attempts to stringently enforce the law. He did not deny that relays were illegal, but expressed the view that his colleagues were too anxious for the letter of the law, and that their action "involved a harshness unforeseen and unintended by the Legislature."

The result of the contradictory decisions of the magistrates and of the different attitudes taken by the inspectors was that factory legislation was in a perfect chaos. The masters complained that "a condition of things altogether abnormal and anarchical obtained; one law was said to hold in Yorkshire, another in Lancashire; one law in one parish of Lancashire, another in its immediate neighbourhood."1

In 1849, when good trade set in, the relay system spread rapidly, and in order finally to settle the matter, a test case was brought by Horner before the Court of Exchequer.² Baron Parke, in giving judgment, declared that the words of the Act were not sufficiently stringent to carry into effect what the Court "strongly conjectured" must have been the intention of the Legislature. Thus the relay system was declared to be legal, and the decision left no alternative but another appeal to Parliament. The Short Time Committees immediately renewed their agitation for a normal working day, enforced by means of a restriction on the moving power of machinery. All the old committees in Lancashire had been reorganised in 1849, when it had been foreseen that, owing to the extension of the relay system, an appeal to Parliament would be necessary, and when the Court of Exchequer

¹ "Capital," by Karl Marx, English translation, p. 279.
² Court of Exchequer, *Ryder* v. *Mills*, P.P. 67, Sess. 1850, p. 3.

gave its decision, the Short Time Committees were in full working order.

Lord Ashley undertook the Parliamentary business, and on March 14th, 1850, asked leave "to introduce a Bill that would carry into effect what had been the intentions of Parliament in 1844."1 The clause which he proposed as an amendment to sec. 26 of the Act of 1844 was found to be ineffective, and a conference of lawyers which sat upon it came to the conclusion that the object in view could not be obtained by any single clause unless new regulations respecting meal times were introduced. The Government proposed to meet the difficulty by fixing the hours of work for protected persons within a twelve hours limit—from 6 a.m. to 6 p.m., or from 7 a.m. to 7 p.m.—allowing one and a half hours for meals, and enacting that on Saturdays work should cease at 2 p.m. Sir George Grey, the Home Secretary, in introducing this Bill, said that he had given serious attention to the matter, and did not think it would be possible to enforce the limitation of hours successfully while the range of fifteen hours was left untouched, and he maintained that the Government Bill, though it would involve two hours' additional labour in the week, would more effectively carry out the object of Lord Ashley than the Bill he himself had proposed. Lord Ashley accepted this compromise, and the Government measure became law.

Mr. Saunders, in his report for 1849, says:-"Former reports from some of my colleagues and from myself declare clearly the opinion that nothing but one uniform set of hours for all persons employed in the same mill in each of the protected classes can effectually guard such operatives from overwork. I find the truth of this proposition confirmed over and over again."2

The manager of one of the largest mills in Manchester

Hansard, 3 S., Vol. CIX., p. 834.
 Report of Inspectors of Factories, Parliamentary Papers, 1849,
 Vol. XXII., p. 239.

said to Mr. Horner that "If there were twenty inspectors we could defy them all if working by relays were allowed." After wide experience and extensive enquiries Mr. Horner came to the conclusion that if relays were sanctioned "no practical system of inspection could prevent extensive fraudulent overworking." 1

Bearing these remarks in mind, it is almost impossible to exaggerate the importance of the establishment by the Legislature of a "normal day" for women and young persons.2

The general attitude of the Short Time Committees towards the Government proposal may be gathered from an account of a delegate meeting held at the Cotton Tree Tavern, Manchester, on Sunday morning, May 12th. The object of the meeting was to consider "what steps should be taken to improve the plan proposed by the Government, by engrafting upon it amendments so as to secure the full advantage of the Ten Hours Act, and in the event of failing in this attempt, whether it is wisdom to throw out the Bill entirely and remain as we are for another year, or whether we will allow the measure to pass, restricting the factory day from 6 o'clock in the morning to 6 o'clock at night, and reserve to ourselves the right of considering the propriety of applying to Parliament next year for the reduction of the two hours which it is now proposed to take from us."

Philip Grant addressed the meeting in favour of the Government Bill, and after a long discussion, in which a general feeling was expressed in favour of an efficient Ten Hours Act, but, failing that, of the Government proposition, eventually the following resolution was passed:-

"That the limitation of the factory day from 6 a.m. to

¹ Report of Inspectors of Factories, Parliamentary Papers, 1849,

Vol. XXII., p. 135.

^{2 &}quot;The whole experience of the Factory Department proves that no limitation of the working day can really be enforced, unless there are uniform and definitely prescribed hours before and after which work may not be carried on." "Industrial Democracy," by Sidney and Beatrice Webb, Vol. I., p. 349.

6 p.m. is a very important feature in factory legislation, and most desirable to be obtained; that an effort be now made to engraft upon that proposal the limitation of the hours of work to ten hours per day, the undeniable right of the operatives; but, failing in that effort, the meeting will use no efforts to endanger the passing of the Government plan, reserving to ourselves the right of again demanding from the Legislature our just rights in another Session of Parliament."

Nevertheless some of the more extreme reformers (including Oastler and J. M. Cobbett)² continued to oppose any compromise, and they considered that Lord Ashley had turned traitor in accepting the Government proposal.

The Act of 1850 was an important turning point in the history of English factory legislation. By it a normal working day was for the first time expressly established, or, in other words, the legal working day was made to coincide with the legal period of employment, allowance being made for meal times. E. von Plener says that "the law, by its clear and distinct provisions, put a speedy and lasting end to the uncertainties and agitation that existed in the manufacturing districts, and met with less resistance and ill-will than had been expected. . . . The gain of nearly the whole of Saturday afternoon was particularly beneficial to the working classes."8

But although general satisfaction was expressed with the working of the Act, there still remained some anomalies, the chief of which related to the employment of children, for whom there was as yet no normal day. The Act of 1850 was an amendment of the Act of 1847, which dealt only with the labour of women and young

The Times, May 14th, 1850.
 John M. Cobbett was the son of the famous William Cobbett. He was Liberal member for Oldham during the years 1852-59 and

[&]quot;History of English Factory Legislation," by E. von Plener, p. 41.

persons, so that by the Act of 1844 it was still legal for the period of employment of children from eight to thirteen years of age, to be taken any time between 5.30 a.m. and 8.30 p.m.

Lord Ashley, in 1850, had urged the necessity of including children in the amending Act, and had proposed an amendment to that effect, but it was twice thrown out, first by a majority of thirty, then by a majority of one, on the ground that his real motive was not sympathy for the children employed, but a desire to restrict the labour of adult men, who could not carry on the work of the factory without the assistance of children.¹

The inspectors reported in 1850 that 257 mills were employing 3,742 children as assistants to males over eighteen, after the women and young persons had left off work.² In consequence of the extension of this practice and the numerous evasions of the law a renewed agitation took place among the Short Time Committees.

This time the working men, at their numerous meetings in Lancashire and Yorkshire, definitely stated that their object was to restrict the moving power of machinery. In January, 1850, a large meeting was held at Todmorden, and the following resolution was passed:—"That as the provisions of the Factory Act are in many districts violated, to the manifest injury of the honest employer as well as to the great oppression of the employed, it is the opinion of this meeting that the only efficient means for preventing such violations is by placing a restriction on the moving power."³

During the next few years large and enthusiastic meetings continued to be held with the object of restoring the Ten Hours Bill in all its integrity; and the speakers invari-

¹ See Hansard, 3 S., Vol. III., pp. 846 and 1,234, June 6th and 14th, 1850.

² See Parliamentary Papers, Vol. XLII., p. 477. ³ Halifax Guardian, January 29th, 1850.

ably stated that this could not be done unless the motive power of machinery was restricted. They fully recognised that all factory legislation had indirectly restricted the labour of adult men, but they now boldly demanded that the limitation of hours should be directly extended to themselves.1

Joshua Fielden, speaking at a meeting at Huddersfield in June, 1853, said:—"We are told by the supporters of long hours that the effect (of the restriction of the moving power) would be to restrict all labour in factories; this is what all the supporters of the present system acknowledge, and Parliament decided that it should be passed (in 1847). and we are now only asking for what they have already granted us." A resolution was passed "That it is the decided opinion of this meeting from past experience that until the moving power be restricted to ten hours per day for the first five days in the week, and seven and a half on Saturday, all legislation upon factory labour will prove an entire failure." 2

There is no doubt that, before 1847, the working men who agitated for a Ten Hours Bill for women and young persons thought that by so doing, they themselves would be protected from long hours, and when they found that the result was not what they had anticipated, their next step was openly and avowedly to declare themselves in favour of a restriction on the hours of labour of adult men. fact is interesting and important in the light of the arguments subsequently brought forward against special legislation for women, to the effect that the real object of the men who have agitated for a restriction on women's labour, has been that women might be thrown out of the field of competition. That this was not the object of the men is shown by the above and many similar speeches. It is equally clear, as a matter of fact, that the regulation

¹ See, e.g., accounts of meetings in Halifax Guardian, February 12th, April 9th, 1853.

² Halifax Guardian, June 18th, 1853.

of women's hours did not lead to the substitution of men for women.

The following table gives the percentages of the different classes employed in the textile industries:-

			Women above 13.	Men above 18.
1838	5.9	16.1	55.5	22.8
1850	6.1	11.2	55.9	26.2
1856	6.6	10.6	57.0	25.81

These figures show that during the first six years after the passing of the first Act which effectively restricted the labour of women, the percentage of women and girls above thirteen rose from 55'9 per cent. to 57 per cent., while that of adult males decreased from 26.5 per cent. to 25.8 per cent.2

The agitation for an effective Ten Hours Act continued, and in 1853 J. M. Cobbett brought forward a Bill, which had in view the following objects:—(1) To restrict the labour of women and young persons to ten hours a day; (2) to enact that the motive power of factories should be stopped from 5.30 in the afternoon until 6 o'clock next morning.

Cobbett openly stated in the House of Commons that the real object of this Bill was to regulate the hours of work of adult men. Quoting partly from a speech by Hindley, the member of Parliament for Ashton, denouncing the system of working by shifts or relays, he said:-"Is there no consideration for adult men? You have already put them in connection with, and chained them to, the mule, and to the loom, and to the engine. You have bound them to iron, and to brass, and to steel, and

¹ See Report of Inspectors of Factories in Vol. III. of Parliamentary

Papers, Sess. 1857, p. 590.

² After an elaborate statistical analysis of the proportions of different classes of persons employed in the textile industries from 1835 onwards, Mr. G. H. Wood states that "on the whole there seems no evidence of a movement in favour of the substitution of unprotected for protected workers." Journal of the Royal Statistical Society, Vol. LXV., Part II.

you are now—whilst they had before certain protection in the physical weakness of the women and youths with whose working they were associated—you are now going to infuse fresh life and blood into those beings with whom they are to be co-workers on the relay system; so that the question is now to be, as to the adult male, whether he shall be worked to death or not?—fifteen hours a day! sixteen hours a day! Allow the relay system, and who will tell where mammon will stop in its attempt to destroy men's lives? For my part I can regard it as little less than murder, and I trust the Legislature will never allow a system to which such strong objections may be offered. The argument on the other side will be 'but these are free men. You talk of their inevitable connection with brass and iron! These are all figures of rhetoric." To this Cobbett's reply was :-- "Are these figures of rhetoric? We know here they are practical facts. Talk of freedom! The man in the factory is not free."1

It was a daring thing for Cobbett to advocate so openly the regulation of adult male labour; but the time was not ripe for such proposals, and he was forced to withdraw his Bill. A Government measure brought forward by Lord Palmerston was substituted for it, and passed into law. By this Act the normal day was extended to children. Their legal hours of work—namely, six and a half hours every day, or ten hours on three alternate days—remained the same as before, but children might no longer be employed before 6 a.m. or after 6 p.m.; and in case of time being lost in mills which were worked by water power, children were not to be employed for more than one hour a day in recovering such lost time.

This Act had the desired result of establishing by law a uniform working day for all protected persons, and the masters were now no longer able to work their mills for fifteen hours a day. But though the manufacturers, as a whole,

¹ Hansard, 3 S., Vol. CXXVIII., p. 1,255.

submitted at first to the normal working day, it was not long before they resorted to what the inspectors described as "nibbling"—that is, lengthening the working day by beginning a few minutes before six in the morning, and keeping on until about ten minutes past six in the evening, and shortening the meal times by snatching a few minutes for work at the beginning and the end. In this way unscrupulous employers could gain an additional month's work in the year, and the inspectors found themselves almost powerless to put an end to the practice. By the Act of 1844 the presence of any person in the factory constituted employment "unless the contrary shall be proved." Mr. Horner says:-"Now nothing is easier than for a fraudulent mill owner to prove the contrary. He has only to stop his steam engine as soon as the inspector appears, and then all work ceases, and in every information the inspector must prove that the individual named in the complaint was found actually at work. So soon as the illegal working begins-and it takes place at six different periods of the day—the gross daily amount being made up of small instalments, a watch is set to give notice of the approach of an inspector, and immediately on his being seen a signal is given to stop the engine and turn the people out of the mill."1

The Short Time Committees complained of these extensive evasions of the law, and continued to agitate for a restriction on the motive power. Mr. Cobbett, in 1855. made another attempt to bring in a Bill for this purpose, but leave was refused by a majority of eight, on the ground that "the limitation of the work of adult operatives was a principle which the House had hitherto refused to recognise."2

¹ Report of Inspectors of Factories, Parliamentary Papers, 1859, Vol. XII., p. 160. ² Hansard, 3 S., Vol. CXXXVII., p. 605, March 15th, 1855.

This seems to have been the last serious attempt to bring in such a Bill, and for the next few years the attention of the Short Time Committees was turned to other matters.

The inspectors at this time were making serious complaints against the want of precautions against accidents. and the danger arising from machinery and horizontal shafts being insufficiently fenced in. To understand the controversy that followed it is necessary at the outset to explain the difference between machinery and shafting, and the law with regard to protection from accidents. By the term "machinery" is meant only that actually used in manufacturing processes, whereas shafts and mill gearing are used to put the machinery in motion. Section 21 of the Factory Act of 1844 required owners to place secure fencing round all shafts and gearing. Section 43 of the same Act enabled factory occupiers to submit any case of dispute with regard to machinery—as distinguished from shafts and gearing-to arbitration. The provision requiring that all mill gearing should be securely fenced was not brought fully into force for nine years. When the Act of 1844 first came into operation, strong representations were made by the occupiers of factories that the fencing of horizontal shafts at a height of more that seven feet from the ground was quite unnecessary. An appalling number of accidents continued to take place, and it was found that no security against accidents of the most serious kind was afforded by the position of the shaft, however elevated, and numerous instances are given of persons having been caught by a shaft quite close to the ceiling when lime-washing, or when oiling the couplings and gearing. Lord Palmerston drew the attention of the inspectors to the fact that many of these accidents were due to their own neglect of duty in not putting the law in force. In January, 1854, a circular was issued by the factory inspectors stating that in future they would require the fencing of all shafts, however elevated.1

¹ The circular is printed in full in the Appendix to the Reports of F. L.

In March, 1854, a deputation of factory occupiers waited on Lord Palmerston to protest against the circular, and to represent to him that only shafts under seven feet from the floor could possibly require fencing; and they succeeded in inducing Lord Palmerston to order that the inspectors' circular should be provisionally suspended, and another one substituted.

The second circular was not clear in its requirements. It allowed a broad interpretation to the term "secure fencing," and manufacturers might adopt various means for protecting shafts above seven feet from the ground. But, having got this concession, the manufacturers failed to take the necessary precautions, and there was no decrease in the number of accidents. In January, 1855, a third circular 2 was issued, requiring the secure fencing of all horizontal shafts; and stating that no shaft within seven feet from the floor would be deemed securely fenced without a permanent fixed casing. The circular was silent as to what constituted secure fencing in the case of horizontal shafts more than seven feet from the floor.

When the second circular had been issued, a large meeting of manufacturers was at once held in Manchester, for the purpose of considering what course should be taken, and they passed a series of resolutions determining to form a Factory Law Amendment Association³ to relieve the trade from what they described as "undue restrictions and mischievous interference." All factory owners and calico printers were to be admitted on payment of one shilling per horse-power of the machinery they owned.

This Association appears to have been not a mere combination ad hoc against the order for fencing seven-

Inspectors of Factories, Parliamentary Papers, 1854-5, Vol. XV., p. 423. 1 *Ibid.*, p. 427.

² Ibid., p. 429. ⁸ See The Economist, March 10th, 1855.

feet shafts, but a league of all opponents of factory legislation among the employers, directed especially against the effective administration of the existing law. For instance, Mr. Whitworth, one of the speakers at a general meeting held in Halifax Town Hall, said that the Association should "take the Factory Act in its totality, and see whether there were not parts of it that require great alterations, whether other parts did not require to be entirely expunged, and whether there was not a power given to the factory inspector totally at variance with the liberty of the subject." He complained that manufacturers were "liable to be brought before the magistrate any day, and that, too, upon the most trifling charges. Their premises might be entered at any time. No search warrant was required, but the inspectors went to the mills as if the proprietors were the greatest scum of the earth, and searched the premises at any time. He thought they should try to repeal or totally remodify the Factory Act."1

In March, 1855, a deputation from the Factory Law Amendment Association waited on Sir George Grey. The spokesman, Mr. Grey, stated the case of the mill owners in the broadest manner, referring not only to the regulations for horizontal shafting, but to the whole system of factory inspection and legislation. He complained that the mill owners "as a body were subjected to legislative restrictions and to a sort of inspection, from which all other classes of manufacturers were totally exempt "2; and he urged that either the mill owners should be relieved from these inflictions, or else that the same regulations should be extended to other classes of manufacturers.

Sir George Grey regretted that the successive circulars of the inspectors had created so much confusion, but he would not hold out to the deputation any hope that the

¹ Halifax Guardian, March 24th, 1855. ² Ibid., March 31st, 1855.

Government would take steps for the amendment or alteration of the law. The utmost assistance that he could offer was to aid the promulgation of such instructions as might modify the stringent and literal application of the law.

In April, 1855, the local "Factory Law Amendment Association" were merged into the "National Association of Factory Occupiers," which was continually referred to by Dickens as the "Association for the Mangling of Operatives." The first report of this Association states that their object was "to watch over factory legislation with a view to prevent any increase of the present unfair and injudicious enactments; to obtain an amendment of the present Factory Laws and their administration, and to protect the members of the Association from improper prosecutions and legal proceedings instituted or promoted by the factory inspectors or by other parties. But the Association shall be precluded from attempting to alter the hours of labour of women, young persons, and children, as by law at present limited, and from attempting to abolish factory inspection."3

In spite of the latter statement it is evident from the report itself, and from speeches made by members of the Association, that the real and ultimate object was the repeal of the Factory Acts. Mr. Thomas Bayley, President of the Manchester Chamber of Commerce, at the public meeting which was convened for the purpose of forming the Association, said that it was "most humiliating that the factory industry of this great country should be compelled to seek to get rid of legislative enactments which ought never to have been passed." In the report of the Association the factory inspectors are referred to as "a body of men, who have assumed to themselves the

Ibid., April 21st, 1855.
 See various articles in Household Words, 1855.

^{*} For this and the following quotations see Special Report of the Executive Committee of the National Association of Factory Occupiers, Manchester, 1855, C. T., 278.

interpretation of the law, and have tried to intimidate the magistracy into acquiescence in their views. To the unusual liberty of presenting to Parliament a report of their proceedings they have annexed the right in that report to cast imputations on the manufacturers as a class, to falsify the aspect of factory offences, so-called, by denouncing as criminal, circumstances which invoke no moral guilt."

Horner was singled out as a special object of abuse and attack, and the factory occupiers at one time went so far as to request Sir George Grey to dismiss him from office. The Home Secretary himself is, in the report, referred to as "indiscreet," "imperfectly informed," and "from ignorance or want of true information, the mere agent of the inspectors."

The Short Time Committees were fully convinced that the masters had ulterior motives in forming their Association, and in the Halifax Guardian we read: "The ten hours men must prepare for another campaign. . . . The fencing question may be as fatal to the Factory Act as the relay system was to the ten hours limit. The National Association of Factory Occupiers began with the plea that they only wished an amicable settlement of this question. . . . But the mask is now thrown off. The associated masters refuse to advise any system of shaft-fencing, have taken open ground against any legislative interference, and have procured the pen of Miss Martineau to write down the Factory Acts themselves as 'meddling legislation.'"

The controversy over the fencing of horizontal shafts continued, and in 1856 a case, upon which contradictory decisions had been given by two magistrates, was brought before the Court of Queen's Bench, with the result that Lord Campbell ruled that the law must be strictly obeyed.

In April, 1856, the National Association of Factory Occupiers succeeded in carrying through Parliament a Bill

¹ Halifax Guardian, February 16th, 1856.

favourable to themselves. It was introduced by Colonel Wilson Patten, and passed into law in spite of opposition from Cobbett and others. By this Act mill gearing was placed on the same footing as machinery, and the requirement of a secure fencing of mill gearing was to apply only to those parts with which women, young persons, and children were liable to come in contact. In the case of other parts of the mill gearing resort might be had to arbitration in case of dispute between the occupier and the inspector.

The inspectors, in their joint report in January, 1857, thus describe the effect of the Act of 1856:-" Under the new statute . . . the persons whose 'ordinary occupation' brings them near to mill gearing, and who are consequently well acquainted with the dangers to which their employment exposes them, and with the necessity of caution, are protected by the law, while protection has been withdrawn from those who may be obliged, in the execution of special orders, to suspend their 'ordinary occupation,' and to place themselves in positions of danger, of the existence of which they are not conscious, and from which, by reason of their ignorance, they are unable to protect themselves, but who on that very account would appear to require the especial protection of the Legislature."2

If an occupier, after having received a notice to fence mill gearing, desired to submit the matter to arbitration, a person "skilled in the construction of the kind of machinery" to which the notice referred had to be appointed. Mr. Horner, speaking of this, said that "the question is one which requires for its solution, not the opinion of professional engineers, but the evidence of intelligent and observant men who are daily employed in the factory." He said that "engineers and machine makers . . . have

See Hansard, 3 S., Vol. CXLI., p. 351.
 Report of Inspectors of Factories, Parliamentary Papers, 1857, Vol. III., p. 561.

really no familiar personal knowledge of the way in which shaft accidents occur"; they "look only to the construction and working of the machinery, which is their business, and not to the prevention of accidents, which is not their business. . . ." Moreover, on account of their connection in trade with the factory occupiers, it was not likely that such arbitration would give an impartial decision.

For these reasons the inspectors refrained from giving any notices, under the Factory Act of 1856, which would call into action "the imperfect extrajudicial kind of

arbitration provided by that statute."1

Thus the manufacturers gained their point as to the fencing of horizontal shafts, but their efforts failed to bring about any other modification of the Factory Acts. In spite of the fact that they repeatedly declared that either the Factory Acts must be modified or the industry of England would seriously decline, the next ten years witnessed the gradual extension of the Factory Acts from textile mills to other trades and industries.

¹ Ibid., Joint Report of Inspectors of Factories, p. 7.

CHAPTER VII.

THE INCLUSION OF INDUSTRIES ALLIED TO TEXTILES, 1845—1861.

Print Works-Bleach and Dye Works-Lace Factories.

THE extension of the Factory Acts from one industry to others coincides with a change in the manner of regarding the system of regulation and inspection that had been gradually built up in the textile industry. As we have seen, legislation for this industry had been demanded on the ground of certain definite abuses, generally with the implication, tacit or avowed, that these evils were peculiar to textiles, or to the factory The opposition could sometimes retaliate by showing, that there was no special virtue in the hardware, pottery, or metal trades, and no special vice in weaving or spinning, that children, women, or young persons should be less protected in the one than in the other. The Commissioners of 1833 frankly admitted that children were probably exposed to no worse conditions in textile factories than in other industries, though they evidently did not realise the latent implications of their argument that regulation must be applied first, not necessarily to the worst conducted trades, but to those best known. The real reason for starting with the children in cotton factories was that the industry being a concentrated one, carried on in large buildings in which great numbers were employed, with a certain degree of publicity, it was easier for the Government to learn what the conditions actually were and how they could be dealt with. The Commissioners failed to recognise that the more the conditions in other industries

came to be studied, the more difficult it would be to leave them to unrestricted competition. Although the progressive regulation of the labour of women and children has been slow and dilatory to a degree which, especially in the case of the children, has been little less than criminal, it has been conducted on sound experimental principles. Accurate knowledge of the conditions prevailing in an industry is an indispensable condition of legal regulation. For this reason the cotton trade was the easiest to control, and having once established the principle of regulating hours and conditions of work in this trade, the Government had it continually before their eyes as a point of departure for further legislation. If it could be shown that this regulated industry, far from suffering in competition with others, went ahead, improved its machinery, and developed a higher standard of comfort than its rivals, then, although the improvement might not be due to the legislation, there would be, at all events, a strong presumption that good, and not harm, had been done. And this is what has taken place. No one has ever been able to get up in Parliament or out and say, "Here is your miserable textile industry, your deplorable cotton trade, drooping and ruined all because of Factory Acts-let us repeal them forthwith." What they had to say was that the improvement in the regulated industry was clear and conspicuous, whilst the irregularities in others remained a crying scandal. Gradually the conviction begins to appear in the utterances of public men that the evils of excessive labour and insanitary conditions, far from being peculiar to one or two industries, were, except under specially favourable circumstances, incidental to them all, and that we were, in fact, allowing competition and the capitalist to weaken the national resources by literally "using up" some proportion of the infant population in each generation, without making any return but the children's miserably inadequate wages.

The conversion of public opinion between 1845 and 1860 was curiously rapid and complete. In 1844, as a reference to the heated debates over the Ten Hours Bill will show, the Opposition was at its bitterest; in 1861 the President of the Economic Section of the British Association could say in his address that the results of that Bill were "something of which all parties might well be proud. There is, in truth, a general assent that if there has been one change which more than another has strengthened and consolidated the social fabric in this part of the island, has cleared away a mass of depravity and discontent, has placed the manufacturing enterprise of the country on a safe basis, and has conferred upon us resources against the effects of foreign competition which can scarcely be over-valued, it is precisely the changes which have been brought about by the sagacious and persevering and successful efforts to establish in manufacturing occupations a sound system of legal interference with the hours of labour." Both Roebuck and Cobden, to say nothing of Sir James Graham and other public men, became converted during this period.2 The cause of this change in public opinion is doubtless to be sought in the factory inspectors' reports. The "Manchester School" had taken it as self-evident that the output of industry must be reduced in proportion to the reduction of hours. The inspectors went about making friends with the manufacturers and studying the relation of hours and wages in concrete instances, and discovered, with a surprise that now-a-days strikes us as naïve, that the output of eleven hours' work might be greater than that of twelve.3 Evidence accumulated that the long hours customary in other trades, far from being productive, positively tended to irregularity of trade, periodical slackness alternating with seasons of excessive hurry and work, an amount of

¹ Reprinted in Vol. XXIV. of the Journal of the Statistical Society, 1861.

² Hansard, March 21st, and May 9th, 1860.

³ See Factory Inspectors' Report, May, 1845, p. 20.

labour being put into a few months that might, with better organisation, have occupied a year. By 1866 Mr. Redgrave could write1 that "the opinion had long been exploded," that lessened production must necessarily follow a reduction of the hours of labour, and in 1867 the proposal to extend the operation of the Acts to all factories and workshops was received with general favour.

We must now consider the subject in relation to the various industries that were successively embraced by the Act. It is obvious that this cannot be done here in a perfectly complete fashion, which would amount to little less than a description of the whole manufacturing industry of the country; all we can do is to indicate the steps which led up to the comprehensive measures of 1867. It was to be expected that the first industries to be regulated, outside textile weaving and spinning, would be those most closely connected with the regulated trade by locality and nature of work. Drawing from the same class of labour the different hours and conditions would be a source of jealousy and friction. Thus, in the print works,2 the inspector found that if he objected to the employment in a mill of a child for twelve hours he was told, "Oh, never mind, she can go to a print field till she is old enough." One mill owner made a point of refusing to employ children who had been previously working at print works, and generally the masters of the regulated trade resented the competition of those who could take children of any age, and work them any hours they liked.

We first get information about the conditions of calico print workers in the Commission of 1843, for which Mr. J. L. Kennedy made an enquiry as to the children and young persons employed in the print works of Lancashire, Cheshire, and Derbyshire.3 He found a large

Inspector's Report, October, 1866, p. 37.
 See Children's Employment Commission, 1843, Vol. XV., p. J. 22. ³ H. C., 1843, Vol. XIV., p. 79.

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number of children and young persons in the industry, viz.:—

			M1.	F.
Adults, 21 and upwards			8,620	484
Young Persons, 13—18			4,147	995
Children under 13.	•		3,616	2,030

Mr. Kennedy made careful investigation as to the age of beginning work, and found that out of 565 children taken at random, nearly two-thirds had begun to work before nine years old.1 Some children and young persons were employed in assisting the elder skilled workmen in colour-making, which sometimes produced pains in the head or faintness from the smell of the colour, but these inconveniences were supposed to be transitory, and the work in itself to be not unhealthy. Others were employed in "back-tenting," which consisted in standing at the back of the printing machine to ensure that the cloth went in evenly and without creases; and in "plaitingdown" or laying the printed cloth in folds after it had passed through the drying-stoves. Children were also employed as "teerers," to spread the colour evenly on a woollen sieve with a small hand-brush, in preparation for the block-printer's work. No power was used in block printing, but it was employed in the roller-printing, dyeing, bleaching, and drying departments.

The hours of work in the machine room were ten and a half per day, but these were constantly exceeded in times of brisk demand,² and the machines were kept at work till seven, eight, nine, ten, and even twelve o'clock, as circumstances might require. The usual hours of work

¹ Of that number	I	had begun	between	4	and	5.
	68 68	>>	"	5	"	6.
	68	,,	,,	6	"	7.
	133	1)	,,	7	"	8.
	156	,,	,,	8	"	9.
	127	1)	"	9	79	10.
	49	33	,,	10	"	II.
	26	2)	,,	ΙI	23	12.
	2	**	"	12	,,	13.
² H. C. 1843, Vol.	$X\Gamma$	V., p. 80.				

for the "teerer" would be from 6 a.m. to 6 or 8 p.m., but were very irregular. Some gross cases of overwork are recorded in this report, and night work was found by Kennedy to be a common practice; there might be no work for two days, and then the hands would work night and day. One witness said he had known a man work three days and three nights without ever going home, keeping the same teerer all the time. But block printing, as it appeared to Kennedy, and as he was told by witnesses, was not in itself an objectionable or unhealthy employment; the harm was in the long and irregular hours of work, which deprived the children of rest and of any chance of education. The shops would take orders that they could not execute within legitimate hours, knowing that night work would be necessary to execute the order. 1 It did not appear that the children were otherwise cruelly treated in print grounds, though they may have been in former times. Kennedy recommended the abolition of night work for children, and, assuming new provisions for education to be made, a reduction of their hours of work, and measures to be taken for enforcing attendance at school. In his opinion "restriction of hours of labour of almost any class of children, without adequate provision for their education. would be of doubtful benefit." This piece of priggishness probably belongs more to the period than to the man, and should not be counted against him, for his report, and especially his remarks on the bad economy of long hours,2 are full of value. It had been argued,3 he said, that there was an inherent tendency to work long hours wherever the fixed capital formed a larger proportion than the circulating capital, and that under certain circumstances the profits of the capitalist might depend entirely on his working his machinery to the last hour, but this argument left out of sight the important fact that the productiveness of machinery

¹ *Ibid.*, p. 88.

² *Ibid.*, p. 105. ³ By Nassau Senior, see *supra*, p. 88.

depended on the skill of the operative, and on his power to concentrate and sustain his attention throughout the day: the authors of the theory were mistaken as to the real nature of the labour necessary to ensure uniform production from machinery, and in practice it was precisely in the last hours that the production and profit were found to diminish. Machine tending was by no means so mechanical an occupation as had been supposed. was largely dependent on the skill and diligence of the workman, and experience showed that the attention of the workman, on which the application of his skill and the productiveness of the machine under his care depend, could not be sustained beyond a certain period. "Establishments which resorted systematically to night work have almost without exception become bankrupt, because the attention and skill of workers could not be kept up," and it was a fact that night work had been generally abandoned in the cotton trade, the industry which had reached the highest point of organisation and economic development.

Kennedy then describes an interesting study which he had been able to make of an exceptionally busy time in a print works, during which the roller printing machine had been working unusually long hours, viz., fifteen a day, to meet a special press of business. During four months the machines never stopped from morning till night, and there was no intermission at the dinner hour. From the beginning of the first month to the middle of the second month production was steady, with a comparatively low proportion of spoiled work; a gradual decrease in production and an increased proportion of spoiled work then became visible, and from the beginning of the first to the end of the fourth month this proportion was actually doubled, the average production of the machines during this time decreasing from 100 to 90 per cent. "The amount of spoiled work increased to such an alarming degree that the parties referred to felt themselves compelled

to shorten the hours of labour to avoid loss; and as soon as the alteration was made the amount of spoiled work sunk to its former level." In this case the men had been paid extra wages for their extra exertions, and had no motive to produce this result, and Kennedy arrived at the conviction that in trades requiring skill and attention "the loss, rather than the profit, begins in the last hour."

In the Scotch print works a somewhat better condition of things was found.2 The hours of work were usually from six to six, with two intervals of thirty-five to sixty minutes each for meals; and from six to three on Saturdays. The regular hours were sometimes exceeded, and whenever this was done the children were involved equally with the adults.3 Over hours would not necessarily extend to all the hands in a shop simultaneously; a large order might come in for a particular pattern that happened to have taken; perhaps only some of the printers could do it, or only a limited number of blocks had been cut for it: the goods were wanted in a hurry, and the whole work would fall on a small number of hands. There were so-called "out-by" departments, in which excessive hours were more frequent than in the printing shops. The "out-by" workers were those who prepared the goods for the printers, or who finished them after they came from the printers' hands, such as the bleachers, the stove-girls in Turkey red stoves, and the folders and packers. The goods printed during the day on the Leven, for instance, might often be dried, finished, folded, and packed the same night in time to arrive in carts at Glasgow the next morning. But the conviction was gaining ground that extra hours were injurious to both parties. Most manufacturers were being forced to the conclusion that overtime was dearly paid and the work worse done, whilst men on day wages

3 Ibid., p. 32.

¹ Ibid., p. 105. ² C. Emp. Commission, 1843, XV., Tancred's Report, p. 29 and ff.

were tempted by the opportunity of getting higher rates for overtime, to neglect their work during the regular working hours.

The most regular hours, and also the steadiest occupation for the hands, were found in those works in which the proprietors either manufactured their own cloth or purchased it themselves, and either had a warehouse at Glasgow where the goods could be deposited till sold or shipped them to their own agents abroad.¹ On the other hand, the most irregular employment and the longest hours of work prevailed where the printer was supplied with the cloth by other parties, who gave him an order to return it with certain patterns worked upon it; these were called "job-printers." In other cases, where the printer purchased his own cloth, but printed it only to order, the goods being disposed of before sold, Mr. Tancred found much irregularity.

The condition of the "stove-girls" in Turkey red works was described as involving much hardship.² The work of these girls was to hang the goods in the Turkey red stoves. The stoves were usually constructed with barred floors two or three stories high, and over the bars the pieces were suspended by the middle, with their ends hanging down on either side. Mr. Tancred usually found these stoves, when the girls were filling them, heated to a temperature of 110°, or fever heat, the steam from the wet goods making this far more suffocating than any dry heat could be. The girls went in and out of this great heat with bare feet and little clothing, carrying the goods on their backs to the dyeing department, or to the field or park where the cloth was exposed on the grass, and the "park-girls" collected it into heaps. The hours of these stove-girls and park-girls were very irregular, and often excessive, as they were sometimes required to come at 5 or even 3 a.m.

¹ *Ibid.*, p. 33. ² *Ibid.*, p. 43.

Mr. Tancred's conclusions 1 on the subject of long hours are perhaps worth recording. Unlimited competition, in his opinion, "has a tendency to constrain each individual to adopt practices, not such as he considers abstractedly the best for his own and the public benefit, but such as he finds will best secure him from the rivalry of others." Long hours may be forced upon the manufacturer, not from a persuasion that they are most for his own interest in the abstract, but because if he individually refuses to accept orders on such terms others will secure customers. "A legislative restriction does no individual an injury; it places all upon a footing; it protects the more humane or the more discerning manufacturer from the compulsion exercised upon him by those who do not entertain his objections to excessive hours of labour. An unlimited competition exposes each manufacturer to the caprice, and places him at the mercy of his employer. A combination to resist unfair pressure is possible in a single town," but very difficult over the whole country—hence he argued that an impartial body such as the national Legislature should assume the power to do for all what cannot be done without the assistance of the supreme authority—to coerce the reluctant minority.

Scarcely anything in the whole history of the Factory Acts is more disappointing than the coldness and apathy with which the Report on the Employment of Children in Manufactures was received. The Commissioners did admirable and careful work, and made out a clear case for legislation in several industries. But, with one or two exceptions, these industries received little attention until two decades had elapsed, and the work of enquiry had then to be done over again. Lord Ashley brought in a Bill in February, 1845, to restrict the hours of children in print-works, and though the regulations proposed were less stringent than those of the Factory Act of the previous year, he had considerable

difficulty in obtaining the sympathy of the House, and his speech is couched in pathetically apologetic terms. He feared that "in the frequent reproduction of subjects of the same class" he might become "exceedingly tedious to the House." He had been repeatedly taunted with a one-sided humanity, and with leaving untouched worse evils than those he assailed. It had been vain to reply that no one could grapple with the whole at once. On his first introduction of the Ten Hours Bill his opponents sent him to the collieries; when he went to the collieries, he was referred to the print-works-it had been said to him more than once, "Where will you stop?" and Lord Ashley said, "I reply, nowhere, so long as any portion of this mighty evil remains to be removed." His desire and ambition was "to bring all the labouring children of this empire within the reach and the opportunities of education—within the sphere (if they will profit by the offer) of happy and useful citizens." This bold declaration of a comprehensive policy, of which his present Bill was but an instalment, doubtless alarmed the House. James Graham, who followed him, took up this point, and said he viewed it with "serious apprehension." He pointed out the difference between print-works and ordinary factory labour. "From the use of machinery, factory labour is necessarily concentrated—therefore easily inspected—therefore difficult of evasion—therefore rendering the operation of the law on the persons employed in the manufacture easy." But the labour in print-works was not concentrated, but dispersed; supervision, therefore, difficult and evasion, easy. Cobden objected further that "in the cotton factory the business was regulated by the steam engine; when that stopped the whole machinery was stopped; but in calico print-works more than half the persons employed were dissevered from the machinery."

Sir James Graham protested strongly against the inclusion in Lord Ashley's Bill of the houses in which the quite dissimilar operations of dyeing, bleaching and calendering

were carried on. He also objected to the limitation of hours on the ground that the demand for labour in the industry was uncertain. "During the time of the demand everything depends on the work being executed with the least possible delay." "It is therefore a material injury, not only to the employers but to the adult workmen, and even to the children themselves, that any attempt should be made to check this labour while the intensity of the demand is great." On the other hand, he offered to support Lord Ashley in prohibiting the employment of children under eight, and the night work of children under thirteen, and of women, on condition that the references to dyeing, bleaching and calendering, and the limitation of children's work to eight hours a day, were dropped. Lord Ashley decided to accept this compromise, and the Act as passed imposed the following meagre restrictions: No child under eight was to be employed in printworks: no child under thirteen or woman was to be employed between 10 p.m. and 6 a.m.; children under thirteen were to attend school thirty days in each half-year.

Parliament refused to include bleaching and dveing in the Print Works Act of 1845, on the score of the supposed inevitable irregularity of the industry. The operatives took a different view, and considered that the excessively long hours which they were frequently compelled to work were a good reason for the law to step in for their protection. In 1853, some of the working bleachers in Bolton formed a short-time Committee, with the object of obtaining the same regulation as the textile operatives, and a similar movement was started in the West of Scotland.² A large proportion of the masters were not averse to shortening the hours of work, if it could be done by common consent. In June, 1853, thirteen of the employers in Scotland agreed to limit the hours of labour to sixty-six hours in the week. On a subsequent occasion twenty-three

masters, representing a large proportion of the whole, agreed to limit the hours of labour to sixty in the week, but upon the condition that such a regulation was adopted by the whole trade. It was found, however, that it was in the power of two or three masters to defeat such an arrangement, and that it was impossible to carry it out without legislative interference. In November, 1853, the operative bleachers of the West of Scotland presented to their employers a memorial on the subject, which is an interesting document.1 They point out that the long hours of work to which they are subject not only are exhausting and unhealthy, but "leave us no time for the cultivation of our intellectual faculties. . . . Other trades are enjoying the advantage of Mechanics' Institutes, &c., and thereby improving their minds; and if no change takes place in our trade, the consequence will be that your memorialists will feel themselves degraded in the eves of their fellow-workmen. . . . Man needs periodic seasons of rest. If that be infringed on during the six working days it cannot surprise us if nature demands it back on the Sabbath. We are therefore compelled to acknowledge that the present system either forces us to remain at home, or renders us dull, listless and haggard in the House of God." The Memorialists, with that mixture of piety and good sense which so admirably distinguishes the northern part of Great Britain, added the practical suggestion that "a careful examination of work done in the morning and similar work performed after a day of thirteen hours will, we are confident, show that the work done at the thirteenth hour is either unequal in amount or quality to that done at the first. Other trades have the hours of labour reduced, and we believe the result generally is such as to corroborate our statement that short hours produce more work, and that of a better quality than under the old system."

¹ See Tremenheere's "Report on Bleaching and Dyeing," H. C., 1854-5, XVIII., p. xxii.

In 1854, Lord Shaftesbury introduced into the House of Lords a Bill for regulating bleaching works, which passed unanimously through that House, was then brought down to the Commons at a late period of the Session, and at the request of some of the workpeople, was taken charge of by Mr. Isaac Butt. It was urged that the nature of the trade would require special provisions, and that further enquiry was necessary. The Bill was consequently withdrawn, and the Government appointed a commissioner, Mr. H. S. Tremenheere. 1 who in due course reported on the conditions existing in the industry at its two chief centres, Lancashire and the West of Scotland.

His report showed in considerable detail the difference between the position of the bleacher or dyer and that of the factory owner. The latter works upon his own materials, and can buy more or less, and work up more or less, as he chooses, while the bleacher or dyer is, or was at the time of Tremenheere's report, in nearly all cases "the servant of the public," i.e. of the merchants who purchase the grey cloth and send it to be prepared. The irregularity with which orders might come in, and the dread of losing business by refusing or failing to execute an order in a given time, were a constant excuse for keeping the hands long hours at work. It should be explained that one important part of the bleaching or dyeing process is called "finishing." The aim is to produce in the goods a gloss or particular appearance, in the quality of which the bleacher or dyer's art consists; certain firms have their own particular specialities for different kinds of goods, and, generally speaking, one firm cannot execute the "finish" of another. The merchant would receive an order to send out a certain quantity of a certain kind of goods by a certain date. When orders accumulate masters have to call on

¹ Hugh Seymour Tremenheere (1804—1893), called to the Bar in 1834, was appointed an inspector of schools in 1840, served on numerous Royal Commissions, and was instrumental in bringing about no less than fourteen Acts of Parliament, all having for their object the improvement of the condition of the working-classes.

their people to work long hours, for if the cloth could not be bleached and dyed by the day named the order would be lost; or if it was a common kind of cloth the merchant might send it out unbleached, and the bleacher would lose so much employment. The masters questioned by Tremenheere were ready to admit that the hours of work were too long for women and boys.1 Some masters would have so much employment as to keep the hands at work for twelve months together, from between 6 and 7 a.m. to 8, 9 or 10 p.m., and some of the hands would work to an even later hour, or perhaps nearly all night. Others would only work to this extent during winter and spring months, and have a slack season reaching the lightest point in the autumn.2 Very few of the masters justified the long hours for the young; nearly all were prepared to admit that they were not desirable, and were attended with disadvantage or even loss to the masters: some avoided them as much as possible, and all the masters who resorted to them threw the responsibility upon the merchants, and appealed to the necessities of trade as their justification. Legislative interference was regarded as objectionable, and the masters considered it would be difficult, if not impossible, to carry through.

Tremenheere then took the opinion of certain of the merchants on this point, and found them much more favourable to the extension of the Factory Act—indeed, only four out of fourteen were averse to the legislative restriction of hours. A limitation of hours might, it was admitted, occasionally produce inconvenience, but this would by degrees adjust itself. "Merchants would have to think of their orders a little beforehand." If the whole quantity of cloth could not be done by one bleacher in time, the order might be divided among several, and the merchants did not appear to attribute so much importance to the speciality of "finish" as did the

¹ *Ibid.*, p. ix. ² *Ibid.*, p. vi.

³ *Ibid.*, p. x., also 33 and ff.

bleachers themselves. They pointed out that "there were several whose finish was sufficiently alike to enable them to be employed for similar work," and a limitation of hours for boys and women would probably lead to a more regular distribution of work at bleachworks. No change of the kind contemplated could take place without causing some inconvenience, but the parties affected would learn to adjust themselves to it. One merchant very candidly admitted,1 that, knowing the bleacher would undertake to bleach and finish, say one thousand pieces of cloth in five days, he often, in cases of sudden orders, gave him only five days to do it in; but that if the hours of the boys and women working were restricted, so that he would know the work could not be accomplished in that time, he should have to make his arrangements beforehand to give seven or ten days, or to send part of the order to another bleacher. It was pointed out by the same merchant that if a bleacher lost part of an order on one occasion, it would be made up to him on another, and that very possibly the bleachers would enlarge their works and keep more hands ready. If legislation were alike for all, the outlay would do the trade no harm.

We commend this reasoning to the attention of those who oppose legislation for laundry workers, on the ground of the supposed necessary irregularity of the work. It may indeed be pointed out that all the arguments for regulation that have been found sound in the case of bleaching and dyeing works apply with even greater cogency to laundries, as the latter have a virtual monopoly of the home trade, which bleaching and dyeing works have not.

The general purport of the merchants' evidence² on the question of competition at home and abroad was that the home trade was much less of a season trade than was formerly the case. In consequence of the railway facilities, instead of laying in large stocks, purchasers could now come down to Manchester every few weeks and select what they required; merchants were therefore, as a general

¹ *Ibid.*, p. 34.

rule, prepared with a stock on hand sufficient for current consumption. Of foreign markets, the American, in consequence of improved means of communication, was already less seasonal, and even if any particular market was left for a while bare of any one description of goods, if there were a legitimate demand, that demand would be supplied in the next season, or after a certain interval. A particular shipping order might be lost, but the main stream of export would remain unaffected as long as the particular class of goods was wanted in foreign markets. Tremenheere arrived at the conclusion that a limitation of women's and boys' hours would cause the masters to enlarge their works and improve their machinery, rather than chance losing an order or lessening their connection1; and in 1857 his evidence before the Select Committee showed that the mere anticipation of some such measure had caused additions to be made both to buildings and machinery which would considerably augment the firms' power of getting speedily through an increased quantity.2

Finally, Tremenheere, though desirous, in his own words, to "give full weight to the difficulties which press upon the minds of the most conscientious masters," became convinced that the masters greatly over-rated the obstacles to a Factory Act³; that although things might have improved on the whole, and hours shortened, yet women and boys were still liable to work fourteen, fifteen and sixteen hours a day for many months together; and he decided to recommend the extension of the factory day of 6 a.m. to 6 p.m., rather than inclusion under the Print Works Act, which merely forbade work between 10 p.m. and 6 a.m. He thought, however, that the fencing of machinery need not be made compulsory, as accidents were rare, and the inspector's suggestions would probably be attended to.

¹ *Ibid.*, p. xi.

² H. C., 1857, XI., Sess. 2, Q. 164. ³ H. C., 1854—5, XVIII., p. xvi.

In consequence of Tremenheere's report, several Bleaching and Dyeing Bills were introduced into Parliament in the ensuing year, but none of them were successful. In 1856 there was a stormy debate over one of these Bills which reminds us of the factory crusades of earlier times. Mr. Baxter, taking the traditional view, objected that the work depended so much on the weather, that any limitation of hours would inflict much loss on both parties, and added that "the effect would be to substitute male for female labour." 2 Mr. Murrough poetically remarked that the hon. member was bleaching, "not linen, but the blood of boys and girls." Mr. J. M. Cobbett contradicted the statement that shorter hours would involve the loss of the goods, and showed that many masters were in favour of the Bill. Mr. Muntz foreshadowed the modern view in observing that "what was gained in one way was lost in another by overwork, and there was no getting more out of a human being than his constitution would fairly yield."

In the following year a Select Committee of the House of Commons made further enquiry into the conditions of this industry. Mr. Cobbett was chairman, but some members of the Committee were strongly biassed against legislative control, and the report of the evidence reveals in them a tendency to "bully" witnesses whose evidence went against their view.3 It came out, however, that the workers were subject to the evil of being constantly on foot, exposed to great heat, often 90° to 130° for long hours, occasionally as much as sixteen or eighteen a day. Mr. Richmond, a surgeon who attended a house in which lodged large numbers of women and girls employed in these works, said that the sick list varied in proportion to the hours worked; in slack times he would have very few patients among them, and many more when they were

¹ Hansard, June 6th, 1856.
² An early instance of an argument that has been much used in

³ See H. C., 1857, XI., Sess. 2, evidence of Richmond, a surgeon, and J. Leck, a master bleacher.

working full time or over hours. A master gave evidence1 that there was no necessity for the long hours of work; he was forced to work late because others did it; the more respectable masters would agree to a short time movement, but the smaller bleachers "worked night and day, and supposed they were cheating the landlord by getting double tides out of him for one rent." Another master 2 found that he lost ten to thirty pieces a day by working overtime. In accordance with the evidence, Mr. Cobbett prepared a draft report to the effect that the hours of work for women and young persons in this industry were excessive, and should be reduced in number, and that this improvement was not likely to be general or lasting unless secured by legislative enactment. Another draft report was prepared by Messrs. Turner and Kirk, unfavourable to legislation. The first was thrown out by a majority of the Committee, and the second was adopted, with a rider "earnestly recommending" the bleachers and dyers of the United Kingdom to reduce the hours of work.

The matter, however, was again agitated in 1860, when Lord Brougham brought it before the House of Lords, 3 urging that some notice should be taken of the evidence given before the Select Committee, which he "had been unable to dismiss from his mind," although the Committee had been so little impressed by it as to report against legislation. The debates in the Commons this year on the Bleach and Dye Works Bill are chiefly memorable for the recantation of both Sir James Graham and Mr. Roebuck. The former owned in a perfectly straightforward, if unenthusiastic manner, that he had been mistaken in believing that the Factory Act would be disastrous to trade, and that, on the contrary, it had "contributed to the comfort and well-being of the working classes without materially injuring the masters." 4 Roebuck, with characteristic impetuosity, flung himself on the side of regulation

¹ Q. 3,393.

² Q. 3,439.

Hansard, Feb. 27th, 1860.
 Hansard, May 9th, 1860.

with all the enthusiasm that sixteen years before he had devoted to opposing it. "I appeal to this House whether the manufacturers of England have suffered by this legislation? The Hon, Member for Manchester still makes the same objection. He gets up and prophesies all sorts of evil if we interfere now; but he has left out of view the evils for the prevention of which we are asked to interfere. . . . When he tells me the Manchester manufacturers are likely to suffer, I say, let them suffer. . . . We complain bitterly of the hours of this House, and if we come at four with liberty to go away and dine at seven. and then do not go home till two in the morning, we say, 'What a terrible night's work we have had!' Well, then, think of the poor child between thirteen and fourteen, or between ten and eleven, not able to go away and get a good dinner, not sitting while at work upon these soft cushions, but standing upon her poor, tired little legs for hours and hours together."1

The evidence had produced its effect, and the Bill passed its third reading July 27th, 1860. It placed bleach and dye works under the Factory Acts, excepting open-air bleaching; but it made the enforcement of the law very difficult by permitting the making up of time lost "in consequence of fluctuations in trade, the nature of the process or any other cause." 2 In 1862 an Act was passed to prohibit night work in open air bleach fields.3 Inspector Baker, in his report for October in that year, remarked that, while the Factory Act proper was satisfactory to both parties, the Print Works Act was a failure, and the Bleach and Dye Works Act most uncertain on account of the exemptions and exceptions granted. In 1863 and 1864 further amending Acts were passed for the processes of calendering and finishing respectively.4 In 1867 the Select Committee of the House of Commons, to whom

¹ Hansard, March 21st, 1860.

 ^{2 23 &}amp; 24 Vict., c. 78.
 3 25 & 26 Vict., c. 8.
 4 26 & 27 Vict., c. 38, and 27 & 28 Vict., c. 98.

the Factory Extension Bill was referred, recommended that print works and bleach and dye works should not be included in the Bill then before Parliament, on the ground that no enquiry into the operation of the Acts regarding those industries had taken place, the Children's Employment Commission not having included them. Another enquiry was accordingly held in 1868,1 and the Commissioners, Messrs. Tremenheere and Tufnell, reported in favour of levelling up the regulations in these industries to those included in the Act of 1867, with some small modifications. Turkey red dyeing constituted a special difficulty, owing to the danger of the goods taking fire by spontaneous combustion² in the "oily depôt," also because the various processes involved in it were distinct, each process taking a day to itself, and the works were arranged to admit of a certain quantity being put through these processes each day. In the Scotch works the usual hours were from six to six, with two hours for meals. The Commissioner, therefore, recommended that young persons and women in this trade should be allowed to be employed "according to the customs of the trade in each locality in which the trade is carried on; provided always, that their total hours of work do not exceed ten and a half in any one day, and sixty in any one week, with not less than the usual intervals for meals." In 1870 3 an Act was passed to consolidate the various Acts relating to print works and bleach and dye works, and its first schedule permitted overtime in Turkey red dyeing "for the purpose only of preventing any damage which may arise from spontaneous combustion." In other respects print works and bleach and dye works were placed under the regulations of the Act of 1867, with certain exemptions as to the work of male young persons between sixteen and eighteen, and as to overtime.

¹ Report by Mr. Tremenheere and Mr. Tufnell, in H. C., 1868—9, XIV.

² *Ibid.*, p. 110.

^{3 33 &}amp; 34 Vict., c. 62.

In 1860 Mr. Tremenheere was instructed by the Secretary of State to visit the towns and districts in England which were the seat of the lace manufacture, and enquire as to the expediency of imposing the regulations of the Factory Act upon them. This question had come under the consideration of the Government during the enquiries that preceded the Factory Act of 1833, and again during the investigation of the Children's Employment Commission from 1840 to 1843. Detailed evidence had been given showing that women, children, and young persons in considerable numbers were employed upon, or in connection with, the lace machines at all hours of the day or night, and that these very early and late hours were in many cases extremely injurious to health, and deprived the young ones of any opportunity of education. But although it was felt that the protection of the law should be given to these classes of persons, both for their own sake and in the interest of the community, there were features in the trade that made legislative interference at this time difficult (Mr. Tremenheere's report says "impossible").

A large proportion of the lace machines were worked by hand in private houses, and it was felt that a domestic industry of this kind could not well be reached by legislation, while, if legislation were extended only to places where power-machines were used, it would indirectly confer an immunity on others which would be unfair to the former, and check the tendency to apply steampower to the whole. Since the time of the Children's Employment Commission of 1842, the factories had been gradually driving out the domestic manufacture, and at the time of Mr. Tremenheere's report, he believed that. out of 3,800 machines to 4,000 machines, not more than ninety were then worked by hand in private houses; and these few, being of old-fashioned construction, were not likely long to survive, and might be disregarded. Nevertheless, if "legislation to the full extent of the Factory

Acts" were to be urged, it would, he said, have to be taken into account that there were certain subsidiary processes which were regarded as peculiarly the province of women and girls, which could easily be done in neighbouring cottages, where the limitation of hours might be evaded. This was especially the case with the work of winding the silk or thread on brass bobbins, which was the principal work done by women. When wound, these bobbins were placed, generally by the boys, in the "carriages" which kept them in place on the machines, and when so placed, the end of the thread was passed through an eye in the carriage, which was thus "threaded." The special peculiarity of the lace manufacture was that, whereas in the trades already under the Act, children and women were employed while the machinery was in motion, in the lace they were employed preparatory to the machines being set in motion, and subsequently in taking out the exhausted bobbins to refill and replace in the machines. The latter operation took two to four hours, and required great manual dexterity. As the pieces were finished (or, in the trade expression, "came off" the machines), at irregular hours, according to the kind or quality of the work done, the women and children were required to be either at the factory or within call for much longer than they were actually employed, and for some hours at a time they might have literally nothing to do. In the opinion of several witnesses examined by Mr. Tremenheere, the most desirable thing for the trade would be that the owners of machines should be induced to get double sets of bobbins and carriages, so that the extra set could be wound and threaded within factory hours. These witnesses were in favour of imposing the Act without any relaxation, because they believed that it would have the effect of hastening this improvement; they, however, admitted the danger that the law might be evaded by taking the bobbins and carriages into neighbouring houses or cottages, where

¹ Tremenheere's Report, H. C., 1861, XXII., p. 8.

unrestricted hours could be worked. As one witness said 1: "What is to prevent a man taking his bobbins and carriage across the road into his own house, or into any house, and when they were wound and threaded, bringing them back again? . . . You could not meddle with what was done in a private house." Some witnesses were so impressed with this difficulty, that they advocated a clause being inserted in the Lace Works Bill to the effect that "bobbins and carriages wound out of the factory, and then placed in a machine worked by steam power, should, for the purposes of the Act, be deemed to have been wound and threaded within the factory."

The extreme irregularity in the hours worked by women, children, and young persons was due to the custom of the male workers working in "shifts." Two men, or a man and a boy, might superintend two machines. When the machines were kept at work for eighteen hours, the first hand came on at four and worked till eight; the second came on at eight and worked till one; the first returned at one and worked till six; the second from six to ten—thus giving nine hours' work to each hand, with intervals of four or five hours.

It was alleged that, although the youths under eighteen who were taking these shifts with the men might have to keep extremely early or late hours, the mode of work was not attended with any bad effects of a nature to require legislative interference. It was urged that it was essential to the interests of the lace manufacture that youths from the age of sixteen upwards should be allowed to take these shifts with the men, as their replacement by adults would enhance the cost of production; and without this practice the supply of skilled labour would be interfered with. There might be cases of skilled workmen who did not begin till twenty, but as a rule it was necessary to begin at sixteen.

The women and children who did the subsidiary ¹ *Ibid.*, p. 88 of Report. ² *Ibid.*, p. 7.

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processes previously described might be wanted at any time between 4 a.m. and 10 p.m., or even later, as sometimes the double-shift between them continued till midnight, or even on occasions all night; and it will easily be seen that even if, as the opponents of legislation alleged during this enquiry, the actual hours of work were not excessive, the time during which the workers might be detained, and the deprivation of rest, constituted serious grievances. There were also, as Mr. Tremenheere pointed out. a large number of women and children, stated to be two or three times as many as those actually working in the factories, employed in the dressing and finishing of lace, who were often kept to very late hours. The finishing processes consisted of examining and mending the goods, drawing out threads, clipping, folding, winding, carding, and other light operations, some assisted by light hand machines. All this work could easily be done in any dwelling house. Many very young children were thus employed, and the excuse given for late hours was that large orders often had to be executed at very short notice.

Mr. Tremenheere's recommendations, after taking the evidence, were that the Factory Acts should be extended to lace works with certain exceptions. These exceptions were: firstly, that youths from sixteen to eighteen should be permitted to work between 4 a.m. and 10 p.m. Without this concession he feared that the Act would be extensively evaded, by doing the threading in private houses; and he was also much, and perhaps not unreasonably, impressed with the need of keeping up the supply of skilled labour. The other exception recommended was that the fencing of machinery should not be required in the lace manufacture, Mr. Tremenheere being satisfied, from evidence, that accidents from machinery were "very rare," and when they did occur, were almost always from a hand or finger being caught in the "acting" part of

the machinery, "against which nothing but care on the part of the workman himself can guard." These two exceptions were included in the Lace Works Act of 1861, and the dressing or finishing of lace was also expressly exempted; in other respects the industry was placed on a level with the textile industries. An interesting point, illustrative of the change that was taking place in the feeling of the public and the House of Commons, is that all the amendments made in the Bill tended to increased stringency. Thus, the original Bill permitted work on Saturdays till 4.30, and children of eleven to work full time; but in the Committee the age of full time was raised to thirteen, and the Saturday half-holiday was to begin at two.

The Children's Employment Commission, appointed in 1862, was expressly directed to investigate the conditions prevailing in industries "not already regulated by law." Lace-making in factories had alone been reached by the Act of 1861, so the Commissioners had to inquire into various subsidiary processes and work in warehouses and private houses not under the Act. Machine lace finishing was carried on in large buildings called "dressing-rooms" or "getting-up rooms," both in warehouses and in private houses. Even in the warehouses steam-power was only occasionally used. The demand for lace being very irregular and dependent on changes of fashion, the temptation to the owners of these "dressing-rooms" to work long hours in the busy time, when orders came in, was very great, and though ordinary hours of work for twothirds of the year might be only from eight to seven, for the remainder of the year work would be continued till nine, ten, or twelve o'clock. The great heat needed for the work, the inefficient ventilation, and the frequently crowded state of the workrooms made the long hours of labour specially onerous, and Mr. White, the Commissioner, came

¹ *Ibid.*, p. 27. ² 24 & 25 Vict. c. 117.

³ H. C., 1861, III.

to the conclusion that the pressure of work was more variable in finishing than in making the lace, and that the workers included "a larger number in greater need of protection." Warehouses also were described to be in a very unhealthy condition from over-heating and bad air. The most interesting part of the reports is, however, that relating to private houses.1 Two classes of these were observed by the Commissioners—i.e., "mistresses' houses" and home-work. The mistresses, commonly called "second-hand mistresses," from their taking work at second hand from the warehousemen or manufacturers, were employers of women and girls, in larger or smaller numbers, according to the size of their rooms and the fluctuating demands of trade. The space allowed for each person in some places was very small, the practice being to put as many into a room as could be crowded together, the children on little low stools and the lace on the ground or on frames, no space being left for any other furniture or for anyone to move about. The space for each person was sometimes as little as one hundred, ninety, or even sixty-seven cubic feet. The children would work with astonishing closeness of attention and quickness, scarcely even allowing their fingers to rest, or their eyes to wander from the work, for fear of losing a moment. The alternate pressure and absence of work, and the anxiety suffered, had the effect of prematurely ageing the home-workers, who appeared painfully worn, and began to lose their sight at a comparatively early age. The employment of very young children was less prevalent than in former times, but was still noticeable. The Commission of 1842 had found children employed for wages in lace-making at three or even two years old; in 1862 it was still customary for them to begin work at five or six. The little ones were generally sent home at eight, after having worked from 8 a.m. The girls from twelve

¹ Children's Employment Commission, 2nd Report, 1864, XXII., p. xviii.

years old and upward would be kept in busy times till g or 10 p.m. "If the warehouses were unwholesome from being heated by steam . . . and the quantity of gas-burners, they were yet better than the private houses, because the girls did not work so close together." But, besides the mistresses' houses, large numbers of women worked at lace-mending, drawing, running, &c., in their own houses singly or with their own children, and often for hours quite as long as those exacted by the mistresses. Dr. Robertson, physician to the General Hospital, Nottingham, expressed his "strong opinion" that to effect any real improvement, moral and physical, in the youthful population of the country, it would be necessary to enforce a systematic and skilled inspection of all establishments where more than, say half a dozen, workpeople were gathered under one roof, the same agency to have power to suggest remedies for defects in sanitary arrangements. The Commissioners came to the conclusion that any measure of relief and protection for children in the various branches of lace finishing should if possible be made to reach both mistresses' houses and private houses.

Pillow-lace making in Devonshire, and in Buckinghamshire and adjacent regions, was also described by the Commissioners. The children usually went to work at "schools" kept by women in their cottages. At these lace schools the children began work at five or six years old, and were at first employed four, six, or eight hours a day, but after the first year or two they were sometimes employed as much as twelve, fourteen, or even sixteen hours in the day. The conditions as to overcrowding were, if possible, worse than in the finishing-rooms already described; instances of fifty-two, thirty-eight, or even twenty-four cubic feet per person being given. The work thus carried on was of a kind, as the Commissioners pointed out, commonly called a "domestic manufacture."

¹ Ibid., p. xx.

and hitherto supposed to be beyond the province of legislative control, partly with the tacit assumption that no evil was involved of a nature sufficiently grave to make it necessary, partly with the idea that, even if such evil existed, the law could not reach it. The first assumption had been completely disproved by the evidence now accumulated of the injury to health inflicted on the young women and girls employed. The other impression as to the impossibility of legal control was considered groundless by the Commissioners, "since the Public Health and Local Government Acts have placed under local authorities all over the kingdom administrative officers who only require to be armed with specific power to deal effectually with cases such as these now in question."²

The Commissioners then boldly recommended the extension of the Factory Act, with certain modifications, to private houses and small places of work generally. "It would be greatly to the benefit of the health, comfort, and means of improvement of a very large body of children, young persons, and women if the protection of the law could be so far extended to them as to ensure for them moderate and regular hours of work and an improved sanitary condition of their places of work. But more especially would such legislation be a protection and benefit to the great numbers of very young children who in many branches of manufacture are kept at protracted and injurious labour in small, crowded, dirty and illventilated places of work by their parents. It is unhappily to a painful degree apparent through the whole of the evidence that against no persons do the children of both sexes so much need protection as against their parents."3

The special recommendations of the Commissioners were as follows:—Dressing-rooms and warehouses to be

¹ There is a lively description of a lace school, quite as bad as the details given by the Commissioners, in a book by Charlotte Yonge entitled the "Clever Woman of the Family."

² 2nd Report, 1864, XII., p. xxxi. ³ 5th Report, 1866, p. xxiv.

placed under the Factory Act: work-rooms and mistresses' houses where children, women, or young persons work for wages to be considered as warehouses, with trifling modifications. In private houses where children work for their parents only, and not for wages, the following enactments were recommended, the administration to be in the hands of the local authority: No child under eight to be employed. No child under thirteen to be employed more than six hours in any one day or between 7 p.m. and 6 a.m. Every child, young person, or woman to be entitled to the factory hours for meals. No young person between thirteen and eighteen and no woman to be employed for more than ten and a half hours per day, or between the hours of 7 p.m. and 6 a.m. these recommendations were effectively embodied in the provisions of the Workshops Regulation Act of 1867 will appear in the next chapter.

CHAPTER VIII.

THE INCLUSION OF NON-TEXTILE FACTORIES AND WORKSHOPS, 1864—1867.

The Change in Public Opinion—The Children's Employment Commission—Potteries, &c.—The Act of 1864—Hosiery, Hardware, Apparel, &c.—The Factory Acts Extension Act and the Workshops Act, 1867.

On August 15th, 1861, Lord Shaftesbury in the House of Lords moved for a fresh enquiry to be made into the conditions of employment of children and young persons in trades not already regulated by law. Employment at very early ages-four, five, or six-work at night, long hours, disgracefully insanitary conditions, all of these had been discovered in 1842 to be the characteristic features of such industries as pottery, glass, metal-wares, pillow-lace, hosiery, and many others. Since 1842 the evils pointed out had in some cases been mitigated, in others increased: some old trades had become extinct, some new ones had been created. Further information was therefore necessary. The Commission was appointed, and sat for about five years, issuing reports of deep interest. 1 The first report, issued in 1863, was devoted to the manufactures of pottery, lucifer-matches, percussion-caps and cartridges, hosiery and lace, and to the employments of paper-staining, "hooking and finishing" (subsidiary and unregulated operations of the bleaching and dyeing trade), and fustian cutting. Great stress is laid by some writers on the

¹ This Commission is often alluded to, in a misleading manner, as the second Commission on Children's Employment, but it is more accurate to describe it as the third, the first being the Factory Children's Commission in 1833, and the second the Commission of Enquiry into the Employment of Children in Trades and Manufactures, 1842—3.

difference between a "manufacture" and an "employment," and it is for some reason occasionally assumed that Government is doing a much more startling thing in regulating the one than the other. There seems, however, no essential difference between the spinner or weaver who gives a new form to cotton or woollen threads, and the dyer who gives them a new colour, or between either of these and the shirt or dressmaker who makes them into garments, or the laundress who washes them when soiled. There was, in this respect, no new departure taken in either the enquiry of 1862 or the Acts of 1864 and 1867; for the principle of regulating "employments" had been adopted in the Print Works and Bleach and Dye Works Acts.

The pottery trade showed, in addition to long and irregular hours, and employment of children at too early an age, the prevalence of specially unhealthy conditions, the risk of absorbing lead poison into the human system, and a tendency to progressive degeneration among the workers.² Medical evidence was given and independently confirmed to the effect that "each successive generation of potters becomes more dwarfed and less robust than the preceding one." In 1862 there seemed to have been no improvement since the Commission of 1842 in the important matter of raising the age of employment, many children being still taken on at six, seven, or eight years old.8 Those employed by the "flat-presser" especially moved Mr. Longe's pity. These children, called "mouldrunners," were employed to put the plates or saucers in the stoves or drying-rooms. The temperature of the stoves would be up to 120°, 130°, or even 148°. It was said that the boys thus employed felt the effects even more in after years than at the time. 4 The arrangement of the stoves was considered easily capable of improvement,

¹ H. C., 1863, XVIII., p. xxviii.

² *Ibid.*, pp. x., xxv., xxvi. ³ *Ibid.*, Longe's Report, p. 2. ⁴ *Ibid.*, p. 4.

and one master at Cobridge had introduced a stove which neither required the entrance of the boy nor diffused so much heat. 1 So flagrant were the evils that legislative interference was petitioned for even by the masters themselves, of whom an influential body, including such well-known names as Minton and Wedgwood, signed a memorial to the Home Secretary, apparently in 1862,2 deploring the fact that children were frequently employed before the age of ten, pointing out the "moral and physical evils" that resulted, and stating that in the absence of legislative enactment it was impossible to right those matters by voluntary agreement, "as a portion only of the employers could be brought to consent to such an agreement." This opinion seems to have been general, and it came out also that the employment of children was operating as a drag on the development of the industry. Boys were still employed in Staffordshire, in turning the "jigger"—i.e., an appliance for turning the potter's wheel-which was hard work for young children, and in some of the manufactories of Glasgow and Newcastle their labour had been advantageously replaced by steam-power. In view of the special dangers to health involved in this industry, the Commissioners advised the appointment of a medical inspector, with power to enter, inspect, and examine all potteries in reference to their construction, ventilation, and other arrangements, so far as affecting the health of children and young persons working therein, and to serve notice in writing on the employer of any defects he might notice. If the employer within fourteen days did not signify to the inspector in writing his intention to remove the cause of complaint, the matter, according to the Commissioners' recommendation, should be decided by arbitration.4

N. D.: printed in 1st Report, p. 322. ³ Ibid., pp. 3, 8.

¹ Ibid., p. 4. See also, for improvements introduced, Inspector's Report for October, 1865, p. 16.

⁴ Ibid., p. xxiv,

Two specially injurious employments were noted—viz., "dipping" and "scouring." Boys were employed while very young to carry the ware to the dipper, and they thus spent much of their time in the poisonous atmosphere of the dipping house. Boys of fourteen or fifteen were employed to "gather" the ware from the dipper, and thus came more into contact with the glaze than did the others. Lead entered largely into the composition of this glaze, and "few dippers continued many years at this work without suffering from painter's colic or paralysis; many became crippled at an early age."1 "Scouring" was largely woman's work. The fine dust diffused through the air of the workshop produced great discomfort in the respiratory organs, and, if the occupation was persisted in, disease. There were, however, efforts being made in some potteries to lessen the evil by introducing appliances to carry off the dust.2 The Commissioners considered that the medical inspector whom they wished to see appointed would be the fittest person to propose, under the sanction of the Secretary of State, "special rules" of a sanitary nature to guard against these specially unhealthy conditions, such rules to be settled with the owner or occupier of each pottery, with power, if necessary, to appeal to arbitration in case of dispute, and the rules when established to receive the sanction of the Secretary of State.8

Overtime seems to have been common. The usual hours of work were from 6.30 to 6.30, but these were frequently exceeded in the case of pressing orders, when children as well as adults might be employed till eight or nine. The men would often waste the first days of the week in drink and idleness and then keep the children late on Thursday and Friday to make up for lost time. It is instructive to notice that the wages of boys employed

¹ *Ibid.*, Mr. Longe's Report, p. 5. ² *Ibid.*, Commissioners' Report, p. xxvi. 3 Ibid., p. xxvii.

in "jigger-turning" and "mould-running" averaged 3s. to 3s. 6d. a week. Boys of nine to eleven got only 1s. 6d. to 2s. 6d. a week, which sum, it should be remembered, represented the sole compensation paid for the privilege of thus wasting the health and potential efficiency of future citizens.

The conditions in lucifer match making were even more terrible. In addition to the usual and oft-recounted evils attending long hours and bad air, it was noticed that this work was apt to produce the peculiar and terrible disease known as necrosis of the jawbone ("phossy jaw"), causing great agony, and sometimes involving death or the loss of the jaw. In percussion-cap and cartridge making the special element was the danger of explosion, which had caused the loss of many lives; women and young girls formed the larger proportion of workers in this industry. Paper-staining resembled the bleaching and dyeing trade, in that it varied at different seasons of the year, and at the busy season the hours of work were apt to be terribly long, from 6 a.m. to 9 or 10 at night. Fustian cutting was carried on both in small workshops and as a home industry. The continually increasing employment of children had greatly reduced the wages of men compared with the standard of 1825, at which time child labour was said to have been introduced.2 It was shown that children were kept constantly at work fourteen hours a day, at the end of the week sometimes eighteen or twenty.3 The Bill introduced in 1864 to deal with these six trades, including the homeworking fustian cutters, was the first that had ever included a home industry. This was candidly pointed out by Mr. H. A. Bruce,4 the Home Secretary, but the House showed no alarm at the novelty, the debate being

¹ Longe, p. 4.

² Factory Inspector's Report, half-year ending October, 1864. ³ Hansard, June 14th, 1864.

⁴ Hansard, June 14th, 1864.

almost unanimously in favour of the Bill, which passed both Houses in the summer of 1864. This Act placed the enumerated industries under the Factory Acts already in force, the definition of a factory being widened so as to include "any place in which persons work for hire" in any of the trades specified. Masters were empowered to make special rules for the observance of cleanliness and ventilation, and to attach a penalty not exceeding fr for the breach thereof, the rules so made to be subject to the approval of H.M. Secretary of State. By another section children, young persons, and women were forbidden to take their meals in any room in which certain specified processes were carried on.

The good effects of this Act seem to have been willingly recognised. A letter from a manufacturer stated that "nineteen-twentieths of the earthenware manufacturers were opposed to the Act when it was first introduced, myself among the number. I consider that nineteentwentieths now would be unwilling to part with it."3

In straw-plaiting the employment of mere infants seems to have lingered on long after it had happily been discontinued in industries in which it had formerly prevailed. Children would be set to plait, either at home or in the straw-plait schools, at three years old or even under. In the schools a task of so many yards to plait would be set them by their parents, and the duty of the mistress was to act as overlooker and see that the proper amount of work was done. "The mistresses who get the most work out of them are the most patronised."4 "The

¹ Ibid., June 17th, 1864.

² It is doubtful, however, whether the expression "working for hire" did not in effect exclude home work. Inspector Baker, in his report for April, 1867, p. 26, says that if a fustian cutter employed his own family only he might work all night if he liked, but if he employed one or two women he could not work after 6 p.m., that the inequality caused great dissatisfaction, and that a definition of "working for hire" was needed.

³ Birmingham Daily Post, March 19th, 1867. ⁴ Children's Employment Commission, H. C., 1864, XXII., 2nd Report, p. 203, Horley's evidence.

parents . . . only seem to see how much they can get out of them."1 The actual earnings of these infants were insignificant, but the parents were actuated by the desire to train them to become an early source of profit. The overcrowding in the straw-plait schools was extreme, the allowance of space being twenty-four, eighteen, or even fewer cubic feet per person.

The ancient and interesting industry of hosiery would be a tempting theme on which to linger did not considerations of space compel us to be brief. In 1842 the Children's Employment Commission found it still carried on as hand-work, but in 1846 steam-worked frames were introduced, and in 1852, 3,800 were known to be in existence. The Commission of 1862 thus took up the trade at a time when the effects of the "industrial revolution" might have been expected to be most evident. It was stated that 120,000 persons were employed, directly or indirectly, in the English hosiery trade, and that of these only 4,063 came under the Factory Act. The others were engaged in warehouse work not unlike the corresponding processes of the lace trade-"cutting," "folding," "mending," "packing," "marking," &c.; in working hand-frames in houses or small shops; or in "winding," "mending," "seaming," "stitching," &c., in private houses. The warehouses were mostly situated at Nottingham, Leicester, and Loughborough: the other branches of work were carried on in smaller towns and villages in the counties of Nottingham, Derby, and Leicester.2

The hours in warehouses were stated to be sometimes long, and it was felt to be advisable that an industry which was so close a neighbour to the lace trade should be included in any measure of control which should be applied to the lace warehouses. The masters were in favour of legislative control. The conditions of work in

¹ H. C., 1864, XXII., p. 204.

private houses were far worse than in factories. Hosiery work at this time was developing along two distinct lines. A good deal of the work was already done in factories where steam-power was used, and the production was of course far cheaper and quicker than under the old methods. But the best goods could still be shaped only upon handframes, and some persons considered it unlikely that these could ever be entirely superseded. In some cases wider frames, not worked by power, had been introduced, and these were concentrated, thirty, forty, or double that number, in large shops, the work being chiefly done by men and big youths, as it required greater strength than the old-fashioned narrow frames, which could be worked by women and children.1 The goods thus made were to a great exent finished by hand-needlework, mended, seamed, stitched, and so forth in the country, by women in their own homes, helped by their children, though some were done in warehouses by girls. Children were also largely employed in the domestic manufacture, and owing to the irregular habits of the men, they would be idle the early part of the week and then over-worked. It was said that "an excessive pressure of work is thrown periodically upon very young children, and some are employed almost as infants." Some, indeed, began to work at three and a half, four, or five years. It was common for girls, as well as women, to sit up all Friday night to work, and even for children to be kept up till some time past midnight. The shops were "unfit as places of work for the young," or (as the reader of a later date may consider) for anyone else. Often one to four frames might be placed together in the only living-room, poverty not allowing the double cost of fire and light for a second room. "Many of these rooms are squalid far beyond what is usual in the country dwellings of the poor and of necessity in these, crowded as they are with frames furniture and inmates, and noisy with the rattle of frames

¹ H. C., 1863, XVIII., White's Report, p. 264.

meals such as can be had are cooked and eaten, infants nursed or put to sleep, and other housework done." . . . "The scanty light by which poverty often obliges the seamers to work must add much to the strain upon the eyes in night work. Weak sight is common among seamers." Some details in the hosiery report are singular enough to startle even the most seasoned reader of Employment Commissions. As the Commissioners frankly pointed out, it was the parents who were most answerable for the overwork of children. One child of five and a half was reported "very clever, having been at it for two years; ... she used to stand on a stool to see up to the candle. . . . Little children are often kept up shamefully late on Thursday and Friday till II or 12. . . . Mothers will pin them to their knee to keep them to their work and give them a slap to keep them awake. If the children are pinned up so, they cannot fall when they are slapped or go to sleep. . . . The child has so many fingers set for it to stitch before it goes to bed and must do them."1

The Commissioners recommended placing work in shops and in private houses under the same control as that suggested for lace.

In the Birmingham hardware manufactures the hours of labour were found to be on the average shorter than in some of the instances previously noted, but irregularity was great, and children and young persons were liable to be kept at work very late towards the end of the week. The employment of the very young was also noted here, and it was estimated that in Birmingham alone about 2.000 children under ten were at work, one-fourth of whom were probably under eight. The conditions of many of these industries were found to be unhealthy, principally owing to the amount of dust generated in the processes, which was apt to produce phthisis and irritative diseases of the lungs and mucous membrane.2 The difficulty of

¹ 2nd Report, p. xxxvi. ² 3rd Report, pp. xii, and xiii,

extending the Factory Act did not lie so much in any special unwillingness on the part of Birmingham manufacturers, many of whom expressed themselves in favour of it, as in the peculiarities of the place, the extraordinary number and variety of the industries, and the fact that many of them were carried on simultaneously in large factories and in workshops of all sizes. 1 In the small places the children worked both younger and longer; it was stated that there was no regular limit to the hours, and the small masters with a scanty business had work only by fits and starts, and had to do it when they could get it. "From the number of small employments, children's labour is so profitable in Birmingham that I believe many parents come to live in the town for the sake of their children's earnings. . . . Big girls, if quick, can make half a man's wages, and there are plenty who make 10s. or 12s. a week. . . . "

The Commissioners came to the conclusion that to place large factories under legislative control and leave workshops free—the same kind of work being carried on in both, and the need for supervision and control being conspicuously greater in the latter—would be an injustice to the one and would actually put a premium on the abuses in the other. They recommended that workshops, large and small, should be put under the factory inspectors if possible; but, if the expense were deemed an insuperable obstacle, that the local sanitary authorities should be required to take over the supervision.²

In consequence of the Commissioners' Reports and of the general dissatisfaction with existing conditions, the Birmingham manufacturers in some cases voluntarily introduced the ten and a half hours day, even before they

¹ To this day, for instance, pearl buttons are made in Birmingham in large factories with steam engine and elaborate appliances, in large workshops with thirty hands or thereabouts, working with hand-presses, and in tiny domestic workshops, where the "scrap" collected from the larger places is carefully utilised, and the smallest possible buttons are made from the odd corners.

² 3rd Report, pp. xx., xxv.

were placed under the regulations of the Act. 1 Nothing is more remarkable in the reports and enquiries of these years than this friendly spirit towards State control, and the disposition to welcome and hope much from its extension. Nor is it necessary to suppose that this was entirely due to philanthropic spirit on the part of the masters; it is evident that they had begun to recognise that an improvement in the character of labour would be to their advantage, and that this could only be attained through an improvement in education and a lessened strain on workers in early youth.

In the multifarious industries relating to wearing apparel, the Commissioners had perhaps the hardest and most complicated task of all.2 To simplify it in some degree, they decided to restrict themselves entirely to the study of the work of women and girls, the few boys and youths employed in tailoring and boot and shoe making being left to a subsequent report. There remained the work of dressmakers, milliners, and mantlemakers, considered as one class, and in another all kinds of seamstresses, including shirt makers, collar makers, ladies' outfitters, stay makers, crinoline makers, necktie, belt. and brace makers; tailors, hatters, cap and bonnet makers, boot and shoe makers, glovers, &c. In each of these two main divisions, according to the census of 1861, somewhat under 300,000 females were employed, nearly 600,000 in all, to which had to be added upwards of 112,600 in Ireland and 51,000 in Scotland. One obvious complication of the subject at once met the investigators. Many of these occupations, though sometimes carried on separately, are in other cases blended together; thus the great mercers or drapers combine millinery and dressmaking, and perhaps several or all of the other kinds of

² 2nd Report, H. C., 1864, XXII., p. xlv. and ff.

¹ Inspector's Report, 31st October, 1865, p. 128, also communicated to the present writer by a Birmingham employer from his own recollection. (B.L.H.)

work under one roof with their proper trade. The introduction of the sewing machine had bound many of those trades together, and had so changed the organisation of the industry that the Commissioners confidently expected within a few years to see "a complete revolution in every species of needlework," an expectation which, it is hardly necessary to say, has scarcely been realised. As one keen-sighted witness told the Commissioners, increased application of steam-power will depend altogether on the price and supply of outdoor labour. If that becomes scarce a greater number of machines will be employed. With the present price of labour the application of the sewing machine cannot be profitably extended. Many kinds of hand-labour are cheaper than the same work could be done by the sewing machine."2 There was, however, already a strong tendency to develop the making of wearing apparel into a factory industry. Steam-power was already used for sewing machines in some cases. Women were employed in large numbers in making shirts, collars, and general underclothing, also in tailoring and cap and boot making. An Army clothing factory employed over a thousand persons, nearly all women and girls. At no point, however, could a satisfactory line be drawn between establishments such as this, which were practically factories, and work in private houses. Private houses of the higher class sometimes kept a stock of material and refused or were reluctant to make up dresses unless supplying the material, and thus "were properly retail houses,"3 whilst dressmaking and millinery were done to order on the premises of the large shops. "It is difficult to see the distinction between a large retail drapery establishment having rooms set apart for work and merchants' warehouses having rooms also set apart for

¹ Ibid., p. xlvi.

² Ibid., p. 59. ³ Ibid., p. B. II. This seems to be a mistake of the Commissioners, as dressmakers of this class do not sell material by the yard.

work, e.g., the shirt or sewed muslin warehouses, the work itself being substantially the same. . . . As to the class of persons employed, there is indeed a wide difference between the refined milliners and dressmakers of the higher kind and the ill-clothed and untaught workers of whom many are found in some of the factories; but this difference is imperceptibly shaded off, and more variation is found, owing rather to the standing of the different establishments and local circumstances than to the nature of the work. In the same shirt factories may be seen many persons quite equal to dressmakers, &c., in the smaller houses, and a number of others neither in dress appearance nor in education at all superior to the poorest workers in common factories."

Children under thirteen were rarely found employed, even in the lower class dressmaking, excepting that, where sewing machines were used, girls of eleven and twelve were ocasionally employed as assistants to the machinists. In consequence of so many persons setting up in business for themselves or marrying, comparatively few women above thirty were found in the regular establishment.2 In millinery and dressmaking girls were generally apprenticed, or taken on as learners or pupils for a period varying from a few months to three or four years, the periods being usually longer in the higher class of houses. In some places it was usual to have a formal agreement drawn up, including stipulations as to hours, which were considered by the assistants to be very useful. Apprentices lodged in the house usually paid a premium varying according to the character of the firm from £20 to £50; outdoor apprentices sometimes paid a small premium, sometimes not. It was stated that a high premium was sometimes found to be objectionable, as the girl's friends would naturally be reluctant to remove her and lose the money, however unsatisfactory might be the conditions. Indoor assistants were usually paid a yearly salary, which might

¹ *Ibid.*, p. B. 11.

seem very advantageous to the worker, as it would not be affected by fluctuations of employment and would secure her maintenance. There was a set-off, however, in the fact that, in the absence of any distinct agreement, the employer would be able to extort a good deal of extra work without extra pay. Day-workers being usually paid for overtime, it would be profitable to the employer to get extra hours out of the indoor hands.¹

Workrooms were found in many cases overcrowded to a most objectionable degree. Ventilation was in many cases defective, and the small fragments and particles of dust. shreds of wool, cotton, &c., which pervaded the atmosphere of workrooms were a dangerous source of lung irritation.2 In some cases workrooms were used by night as bedrooms.3 The hours of work, though still undesirably long. were found by the Commissioners to have been shortened since the previous enquiry of 1842. Miss Newton, manager of the Association for the Aid and Benefit of Dressmakers, gave evidence to that effect, but she also stated that fashionable dressmakers, "unless they are very good managers and have excellent first hands, cannot get on with less than fourteen hours a day in the height of the London season," and there were still some houses where they worked continually for sixteen or eighteen hours.4 On the other hand, there were more enlightened employers who recognised the disadvantage of late hours.5 Mr. Levilly was convinced that the most fashionable houses could do their work in the season between 9 a.m. and 10 p.m., and at other times between 9 and 9. cannot see," said Mr. Einstein, "why young ladies should have to work the hours that men will not, and indeed cannot, endure. . . . The only thing needed is that it should be quite general; but that cannot be ensured by any mere moral pressure or social influence. Government

¹ *Ibid.*, p. B. 12.

² *Ibid.*, p. li. ³ *Ibid.*, p. 13.

⁴ *Ibid.*, p. 121. ⁵ *Ibid.*, p. lviii.

must do it if it is to be effectual." The Commissioners arrived at the conclusion that there was "nothing in the dressmaking and millinery business which would be incompatible with the hours of work prescribed by the Factory Act."

In the case of seamstresses the introduction of the sewing machine had been a signal benefit. It had necessitated the employment of older children and girls, the usual age for commencing being about fourteen; and the wages of machinists, 14s. or 16s. a week, were stated to "be at least one-third higher than those of handworkers in the same department."2 Hours of work were more regular and limited in factories—a few of which had adopted Factory Act hours-than in "home-work" and in the houses of small employers. With these latter the hours were frequently long and excessive. "Of all classes the evidence shows that the most prolonged labour occurs in the case of individuals working for themselves; shirtmakers often work from 5 a.m. to 8 p.m., and in the boot trade some hand-workers are occupied from 7 a.m. to 10 p.m." Meal times, both in dressmaking and among seamstresses, were found to be most irregular and insufficient.

The Commissioners considered that it would be impossible to draw a line in sewing trades between the small employers and the large establishments; and that "to interfere with so important an industrial department only where large numbers are collected together, whilst the smaller employers in the same business are left uncontrolled, would naturally cause great dissatisfaction and have the appearance of great injustice." They concluded that all these trades should be placed under the regulations of the Factory Acts, subject to their previous remarks as to subjecting the smaller places of work to the administration of the local authority.

¹ *Ibid.*, pp. 79, 80. ² *Ibid.*, p. lxvii.

³ Ibid., p. lxxvii. Other industries inquired into by the Commissioners were the paper tube or spool manufacture, handloom weaving in

It may seem that we have dealt at needless length with the details brought out by the Commission. This has been with no desire to weary the reader with so many particulars, but solely for the sake of the principle they disclose. In industry after industry it was revealed by these reports that there was nothing special about excessive hours of work, insanitary conditions, overstrain, and waste of life and power; that these were not peculiar to any one kind of work or any one form of industry, but might be found wherever the workers were cheap and competition unregulated, existing perhaps in their acutest form in the "cottage homes of England." It was the study and observation of the actual facts that brought home to the Commissioners that while regulation was imperatively necessary in factories, it was still more needed in the smallest workplaces. Thus we see public opinion driven forward, reluctantly, perhaps, and slowly, but with irresistible force, towards the principle of collective control of all workers. On March 1st, 1867, Mr. Walpole introduced a Factory Acts Extension Bill into the House of Commons, and at the same time a Bill for the regulation of workshops, entitled the "Hours of Labour Regulation Bill." In the course of his speech he said that the success of the Factory Acts had been so great, their beneficial results so marked and so universally admitted, and the evils still existing in some unregulated trades so flagrant, that the time had come for extending the principle of those Acts more widely than ever before contemplated. "We may even act, I will not say upon a new principle, but upon one that before the present occasion has never received full recognition." The principle

Ireland and Scotland, metal manufacture, iron shipbuilding, letter foundries, copper works, tobacco manufacture, bobbin manufacture, indiarubber works, artificial flower and feather making, paper manufacture, glass manufacture, printing, bookbinding and stationery, silk manufacture, rope manufacture, ribbon trade, brickfields, miscellaneous trades, and employment in agricultural gangs.

1 Hansard, March 1st, 1867, p. 1,272.

alluded to is not explicitly stated, but comes out a little later on in the speech. Mr. Walpole had become convinced, he said, that the evils incident to the employment of women and children were found to be "aggravated to a tenfold degree in the small workshops in which children were found at work." He alluded to the objections that might be urged against interference with private dwellings or parental rights, but he showed that passage after passage from the Commissioners' report had demonstrated the necessity of supervising dwelling-houses, and the need for the State, "the parent of the country," to fill the place of the natural protector of the child where parental duties were neglected. It was assumed, however, that all workplaces, large and small, could not be dealt with on a uniform principle, and the dividing line between the large and small establishmennts, Mr. Walpole thought, could not be made with reference to the nature of the work done in them, for it was more or less the same in both. The dividing line suggested by the Commissioners was to distinguish the larger from the smaller establishments by the number of persons ordinarily employed in them, the larger to be made subject to the regulations of the Factory Acts and the supervision of the factory inspector, the smaller to a modified system of regulation and to local supervision. The number that was to constitute this dividing line was 100 in the original Bill, but this was altered in Committee to 50.

This Bill met with little opposition in the House, and that little by no means of a violent nature.2 Even Mr. Fawcett, later on a strong opponent of State interference with women's labour, 3 spoke in favour of the measure. He denied that it involved "any contravention of the principle of economy in legislation"; he said that working men were glad to welcome similar measures, and

Ibid., p. 1,277.
 Hansard, March 1st, 1867; July 30th, 1867. 3 See next chapter.

reminded the House that those who in the first instance had opposed the Factory Acts were now the foremost to come forward and speak in favour of them. Several speakers objected to the dividing line being drawn by the number of persons employed, which experience was to prove to be a fruitful source of embarrassment. But the general principle was admitted with all but unanimity. The day after Mr. Walpole's introduction of the two Bills The Times had a leading article, the tone of which indicates how greatly public opinion had changed. So far from being regarded as romantically philanthropic, like the ten hours amendment of 1844, which had been styled "a triumph of humanity," the Bills of 1867 were taken as a mere matter of common sense and economic prudence. It was pointed out that "the worst result of the old system of unrestricted freedom was that it tempted men to indulge in alternate fits of idleness and excessive labour. They would be drunk for two days at the beginning of the week and would then endeavour to recover their lost wages, not only by overworking themselves during the remainder of the week, but by compelling their wives and children to work unreasonable hours. The result was that no more money was gained on the average than would have been earned by steady, moderate labour. After all, there is but a certain amount of work to be got out of men, women, or children in the twenty-four hours.1 Only a certain amount of work is, in point of fact, got out of them, and the effect of this regulation in the Factory Acts is simply to recognise the fact and induce all classes to act upon it. . . . Nothing can be gained in the end by anticipating our resources, and to employ women and children unduly is simply to run in debt with Nature."2 It is significant that this leading article seems to contemplate even the regulation of men's hours as coming within the range of practical politics, and it would be a tempting subject of speculation whether at

¹ Italics added. ² The Times Leader, March 4th, 1867.

this time, with the researches of the Employment Commission fresh in people's minds, a comprehensive scheme of labour regulation, including even adult men, would not have found a hearing. If such a comprehensive measure had been passed, it would have saved a great deal of the bitterness and reaction against special interference with women's labour that was destined to appear in the next decade. We have here, however, only to chronicle what actually happened, and must next consider the Act as passed.

The statute of 18671 is one of the most complicated of Factory Acts. It was not a consolidating Act, and made no change in the regulations already in force in textile factories, bleach and dye works, lace factories, or the industries falling under the Act of 1864. It brought a large number of new industries under control-viz., blast furnaces, copper mills, mills or forges in which any process is carried on for converting iron into malleable iron, steel, or tin plate, or for making or converting steel; iron foundries, copper and brass foundries, premises in which power is used for the manufacture of machinery, metal articles and gutta percha; any premises in which paper, glass, or tobacco manufacture, letter-press printing, or bookbinding is carried on; and, finally, any premises in which fifty or more persons are employed in any manufacturing process. Here, it is apparent, we get a new definition of a factory, not co-incident with, but supplementary to, the previous scheme of reference, and likely to lead to confusion in application. All these places of work were placed under the sanitary provisions of the Act of 1864 and the regulations in force as to hours of work, age of child labour, fencing machinery, and education, of the Acts of 1833, 1844, 1850, 1853, and 1856. The provision of the Act of 1864 empowering the master to make special rules for dangerous trades, subject to the approval of the Secretary of State, was also repeated, and several restrictions on dangerous processes were included in the

Act itself. No boy under twelve and no woman was to be employed in melting or annealing glass. No child under eleven was to be employed in grinding in the metal trades. No child, young person, or woman was to be allowed to take meals in any part of a glass factory. The inspector was empowered to require the use of a fan or other mechanical means to carry off dust generated by grinding, glazing, or polishing on a wheel, and liable to be inhaled by the workmen to an injurious extent.

The list of modifications and exceptions in this Act is a long one, occupying about twice as many pages as the sections themselves. It is an instance of the curious half-heartedness that seems always to have dogged industrial control in our own country, that even when the principle was so fully admitted as in 1867, and the enactment framed and passed, the Legislature should have gone on to add modifications which nullified half the good the regulation might have done. Male young persons of sixteen and upwards might be employed in certain classes of factories, under a special order of the Secretary of State, and also in letter-press printing, to work for a period not exceeding fifteen hours in any one day. Young persons of fourteen and upwards and women might be employed in bookbinding for a period not exceeding fourteen hours in any one day. The prohibition of women, young persons, and children remaining in the workroom in meal times was withdrawn in regard to iron mills, paper manufactories, and letter-press printing. In blast furnaces, iron mills, letter-press printing, paper mills, and any factory in which the mechanical power was water, male young persons over sixteen might work at night. Various other exemptions and modifications in regard to holidays, fencing machinery, and work by Jews on Saturday nights were also included.

We now pass to the consideration of the Workshops Regulation Act, which was made applicable to any

^{1 30 &}amp; 31 Vict., c. 146.

establishment in which fewer than fifty persons were employed in any manufacturing process, except such factories as were already included under the Factory Acts. The Act of 1864 had made a beginning in the direction of regulating workshops in certain special industries, and this was now to be made general and comprehensive. "Employed" was to mean occupied in any handicraft, whether for wages or not, under a master or under a parent. A "workshop" was to mean "any room or place whatever, whether in the open air or under cover, in which any handicraft is carried on by any child, young person, or woman, and to which and over which the person by whom such child, young person, or woman is employed has the right of access or control." "Handicraft" was defined as "any manual labour exercised by way of trade or for purposes of gain in or incidental to the altering, repairing, ornamenting, finishing, or otherwise adapting for sale any article." The Act in theory was comprehensive, making no exception for children employed by their own parents or for women in their own homes, though it may be noted as a technical point that it did not include out-workers, who were either intentionally or inadvertently excluded by the definition of a workshop as a place to which the employed has right of access and control. In this respect the Act did not go so far as that of 1864, in which no such qualifying clause is to be found, but it is notable that it went further in the regulation of home-work. The Act of 1864 included only places where persons work for hire, the case of children working with their parents without wages being thus excluded. This caused great dissatisfaction among the fustiancutters, who found that when an occupier employed only his own family, he might work all night if he chose; but if he employed one or two women he could not work after six.1 The Workshops Act of 1867, by its definition of "employed" as "occupied with or without wages,"

¹ Inspector's Report, April, 1867, p. 26.

included all home industry, and we thus get the curious position that, while by the Act of 1864 out-workers, but not home-workers, were placed under regulation, the Act of 1867 controlled home-workers, but not out-workers. The discrepancy would probably have attracted more notice than it did, but for the fact that the administrative weakness of the Workshops Act absorbed the attention of all interested in the matter, and in 1878 both Acts were repealed by the general consolidating Act.

Under the Workshops Act, no child under eight was to be employed in any handicraft; children from eight to thirteen might only be employed under the half-time system, as in factories; young persons and women might only be employed for twelve hours, less one and a half for meals, and no child, young person, or woman might be employed after two on Saturdays, except in establishments employing only five or fewer persons. But it must be observed that, though working hours were thus restricted to the same number as those of the Factory Act in force, the limits within which these hours might be taken were much wider. Children might work between 6 a.m. and 8 p.m., young persons and women between 5 and 9. This was beginning precisely on the same lines as the early Factory Acts, which had been framed in all good faith to admit of an "elasticity" which was supposed to be desirable, and with the view of interfering as little as possible with industry. But the experience of the inspectors had shown how illusory such protection was, the only security for observance of the law being the establishment of a "normal day"-i.e., a fixed period of employment equal in duration to the number of working hours permitted, plus meal times. Nevertheless, experience was thrown away, our legislators being perhaps not greatly in the habit of reading blue-books a generation old, and the lesson had all to be learnt afresh in regard to the industries then newly taken under control.

By clause 8 the inspector of the Local Authority wa

empowered to require the provision of a fan or other mechanical means to carry off noxious dust. This was in consequence of the terrible disclosures made by the Children's Employment Commission as to the disease and mortality among Sheffield grinders. Children were to attend school for a minimum of ten hours a week, instead of three hours a day or on alternate days, as in factories. There was no provision in the Act requiring notice of occupation, the exhibition of an abstract in the workshop, surgeons' certificates, measures for cleanliness, or the adoption of special rules. This inequality of the law excited unfavourable comment, especially in Birmingham, where workshops were greatly in the majority, and two classes of manufacturers carrying on the same business in competition with one another might be placed under regulations pressing much more heavily on one class than on the other. It was noticeable that the Bills were generally attacked merely on questions of detail, and not on the principle of opposing State interference. meeting of manufacturers was held at the Birmingham Chamber of Commerce, March 18th, 1867,2 opposing the divisions of workplaces into factories and workshops, and favouring a uniform system based on the Workshops Bill; but no great bitterness was shown, nor was it suggested, as had so frequently been the case twenty or thirty years before, that the trade of the country would be ruined for want of the last hour of children's labour. Some preferred to dispense with children in their business altogether, and the need for extending and giving time for education was unanimously recognised. Amid much doubt, uncertainty, and failure in insight and administrative efficiency, society was gradually groping towards the idea that found expression only a few years later: "The ultimate end of factory legislation is to prescribe conditions of existence below which population shall not decline."3

Birmingham Daily Post, March 15th, 1867.
 Birmingham Daily Post, March 19th, 1867.
 The Times, June 12th, 1874.

CHAPTER IX.

THE WOMEN'S RIGHTS OPPOSITION MOVEMENT.

1874—1901.

The Nine Hours Bill—The Consolidation Commission, 1876—The Act of 1878.

AFTER the Ten Hours Act of 1847 had been passed, together with the Acts completing and amending it in 1850 and 1853, no fresh legislation respecting the hours of labour in textiles was enacted for twenty years. It is not necessary to infer that the operatives were satisfied with what they had attained. In 1867 we find the textile trade unions agitating for an eight hours day, and in 1872 the delegates of various societies met together and formed the Factory Acts Reform Association in order to amend the law as regards hours. The eight hours day was, however, deemed too visionary and unrealisable, and the programme of the 'seventies was to secure a fifty-four hours week—that is to say, nine and a half hours daily and a half-holiday on Saturday.

Contemporary observers seem to have been struck by the admirably business-like manner in which this nine hours movement was engineered, forming a strong contrast with the burning excitement and bitterness of the ten hours movement of the 'thirties and 'forties.\footnote{1} The Factory Acts were no longer passed as mere measures of benevolence to allay agitation and discontent, but were carefully arranged and thought out as part of the organisation of labour between employer and employed,

¹ See Inspector of Factories' Report for 1872.

and then brought before Parliament in order to receive the sanction required to make the agreement binding.1

In the early part of 1873 Dr. Bridges and Mr. Holmes were instructed by the Local Government Board to hold an enquiry in the textile districts to obtain information both from employers and employed, and to draw up a report² on the health of women, children, and young persons engaged in textile manufactures. They found, after taking evidence from both sides, that since the Factory Act of 1847, there was a tendency for greater pressure to be put upon the workpeople, this increased strain occurring in three ways: (a) Each operative had a larger quantity of machinery to attend to; (b) the machinery was driven at a greater speed; (c) the practice of giving overlookers and foremen a premium on the amount of work done led them to exact steadier and harder work than formerly. In view of these changes in the conditions of employment, it was submitted in the report that ten and a half hours of monotonous unceasing labour, even under the most favourable circumstances, might fairly be considered longer than was consistent with the health of young persons between the ages of thirteen and eighteen, and of women generally.3 And this grievance had become especially prominent since the adoption of the nine hours system by so many of the men's unions in other trades.

In addition to these general complaints, special evils were alleged to exist in the manufacture of flax and cotton. In both cases the atmosphere of the workrooms was apt to be loaded with fine dust, the inhalation of which was inevitable in the absence of mechanical appliances to carry it off, the consequence being in many cases disorders of the chest and lungs.4 The Commissioners remarked that the use of fans in carding-rooms, so far from being universal or general, was quite exceptional. Increased

See The Times, June 12th, 1874.
 Report to Local Government Board in H. C., 1873, LV.

³ Ibid., p. 40. 4 Ibid., p. 8.

sympathy with industrial conditions is undoubtedly a sign of the times, whether we regard it as indicating a higher moral tone or a tendency to slackness and effeminacy, and it is interesting to note that these Commissioners went so far as to consider the point of the extreme monotony of factory work. "The exquisite ingenuity which has invented a separate machine for each minute step in the manufacture entails upon the person in charge of such machine a constant repetition during the working day of the same action, unrelieved by any interest in the thing itself, any difficulty calling for the exercise of the mind," yet calling for "unremitting attention, this call being increased . . . by the increased speed of machinery and the constant demand for increased production." 1

The Commissioners, in closing their report, recommended the reduction of working hours from sixty to fifty-four a week, holding, on mature consideration, that even supposing a proportional diminution of earnings to be brought about, six hours a week additional leisure for the workers would promote their health to an extent which would not be counterbalanced by the fall in wages.

The result was that a Nine Hours Bill for textiles, somewhat absurdly denominated a "Factories (Health of Women) Bill," was introduced into Parliament in 1873 by Mr. Mundella. It met with considerable opposition from Mr. Fawcett and other doctrinaire Liberals—an opposition which, it has been shrewdly guessed, contributed largely to the defeat of the Liberals in 1874. Working-class opinion now inclined to the belief that the Conservatives were, on the whole, more favourable to labour aspirations than the Liberals; the possessors of inherited wealth were less likely to use it meanly than self-made men; Conservative employers were reputed to be less tyrannical than Liberal. Those who had made their money had

¹ Ibid., p. 43. See also Dr. Crichton Browne's address to Leeds Philosophical Society, January 7th, 1873, reported in *Leeds Mercury*, January 8th.

² See article by E. S. Beesly, *Beehive*, May 16th, 1874.

supported the Nine Hours Bill, others, whose fortunes were not yet made, opposed it.1 These hopes were doomed to partial disappointment. Mr. (now Viscount) Cross, the Conservative Home Secretary, introduced a Factory Bill for textiles in May, 1874, but the regulation as to hours was only a trifling improvement on the existing law. ignored the representations of Dr. Bridges and Mr. Holmes, and left the period of employment still twelve hours daily, merely deducting an additional half-hour for rest and meal times, or two hours daily in all. This Act raised the age at which work in factories should be permitted to nine, and to ten after one year's lapse, and it made no provision for overtime, which was thus implicitly forbidden. These last were extremely valuable regulations, and though in some respects the Act must be pronounced a disappointment, its clear and stringent regulations served a useful purpose by drawing attention to the chaotic state of the law generally, and to the varying degrees of laxity of the regulations imposed on other than textile industries. It began to be seen that, although as the Factory Acts had been gradually extended to various trades, certain modifications at the outset had been necessary in order to suit the needs of different industries, the wishes of the manufacturers, and the habits of the operatives, yet the time had come when it was both possible and desirable to simplify these modifications.²

In 1876 a Commission was appointed to consider the consolidation of the factory and workshop laws, and was at once confronted with the inconveniences and anomalies that resulted from the unequal pressure of the Acts. Places in which manufacturing industry was carried on were observed to fall into three classes—textile factories or manufactories under the Act of 1874 (excluding works in which no steam, water, or other mechanical

1 Ibid.

² Report of Inspector Redgrave, October 31st, 1874 (1875 XVI.), p. 8.

power was used), factories in general, "regulated by Factory Acts other than that of 1874," and workshops. In the first of these classes, as we have seen, the age of first employment for children had been raised to ten years; ten hours only were permitted for work, with two hours for meals, which had to be taken within a fixed period of employment, either from six to six or from seven to seven; no modifications whatever were permitted, the former statutory exceptions in favour of children in silk mills and for the recovery of lost time in water mills , having been abolished. In other factories ten and a half hours work was permitted to one and a half hours meal times, the period of employment being from six to six (or seven to seven in winter); but a large variety of exceptions and modifications of these hours were permitted, the number and complexity of which caused "considerable difficulty in the administration of the Acts." It was noticed by the Commissioners that no modifications whatever were granted in favour of the six trades brought under regulation by the Factory Acts Extension Act of 1864¹—i.e., earthenware, lucifer matches, percussion caps. cartridges, paper staining, and fustian cutting; in the case of these occupations, no matter how small the number of hands employed, any workplace was a factory. under the strictest existing regulations.2

In workshops and non-textile factories children might be employed at eight years old. In workshops the general system of regulation was in most respects far laxer than in either class of factories, and differed especially in regard to the period of employment. Children might work their six and a half hours a day any time between 6 a.m. and 8 p.m., and young persons and women their ten and a half hours any time between five and nine. The inspectors were strongly in favour of abrogating this difference, which made it very difficult to enforce the law in workshops, and

¹ See above, Chap. VIII.

² Report of Commission, H. C., 1876, XXIX., pp. xii. to xiv.

was a continual source of jealousy and irritation. Workshops, it will be remembered, were at that time legally distinguished from factories by the number of hands employed—i.e., fifty or more hands constituted a factory. no matter what the occupation carried on. To employ less than fifty hands meant coming under the designation of a workshop, and under the regulation of the Workshops Act; but again, workplaces in which certain trades were carried on were, as we have seen, factories under factory law, no matter how small the number of hands employed. The following examples may perhaps make the matter clearer: "a bookbinding shop or printing office is a factory by the Act of 1867, no matter how many or how few hands are employed, while a cornmill, a sawmill, or distillery, a brewery, or a manufactory of the most noxious or dangerous chemical compounds, for instance, is only such where fifty or more hands are employed. A brick or tile works is a workshop in nine cases out of ten, but in the tenth, if it should also produce any kind of pottery, even to the mild extent of a flower-pot or the rudest kind of earthenware, it is a factory." In the same town and in the same street, in establishments engaged in the same trade, the taking on or dismissal of a single hand would decide whether a particular set of premises were a factory subject to a strict code of regulation or a workshop subject to a lax one. The inspectors were practically unanimous in recommending the repeal of the Workshops Regulation Act, and the placing of all workshops, or places employing less than fifty hands in trades not specified, upon the same plane of regulation as the larger establishments in the same trade. As Mr. Redgrave explained,2 the inequalities were a subject of frequent complaint by all factory occupiers, large or small, who found themselves bound to various irritating regulations from which others were exempt, those others being in

¹ Westminster Review, January, 1877.

² Minutes of Evidence, H. C., 1876, XXX., Q. 184.

many cases their keenest business competitors. The conclusion which the Commissioners arrived at was to recommend the extension of the factory "period of employment" to workshops, so that "the limits of hours for labour should be in all factories and workshops 6 a.m. and 6 p.m., 6.30 a.m. and 6.30 p.m., or 7 a.m. and 7 p.m. all the year round." It was their opinion that "experience has proved that the only way to enforce a law against overwork is to provide not merely a maximum period of labour in the day, but maximum limits within which such period may be taken. . . . The existence of a laxer law in workshops causes the larger establishments to farm out work among the smaller, where it is done under less favourable conditions, both sanitary and educational. The imperfection of the law thus produces an aggravation of the evil it was intended to alleviate."2 "The necessity of placing under regulation even those employed indwelling-houses was . . . clearly demonstrated in the Second and Third Reports of the Children's Employment Commission.³ . . . Dwelling-houses in which any child or woman is employed in a handicraft are by the existing law under regulation and inspection. The absence of all complaints of the manner in which the inspectors have exercised the power entrusted to them proves in our opinion that it is one that can safely be left in their hands."

It is disappointing, after this apparently full concurrence in the comprehensive policy of 1864, to find the Commissioners going back on their own avowed convictions, and advocating relaxations in domestic workshops which are a sheer contravention of the principles they themselves had just laid down. "Domestic employment" (defined as "the case of employers carrying on business in their dwellinghouses and employing none but inmates") was recommended for special exemption, not only as regards fixed

¹ Ibid., pp. xxxiv., xcviii.

³ I.e., H. C., 1864, XXII.

meal times, which might perhaps be inevitable, but also as regards "requirements in the shape of registers and notices" and period of employment. "We recommend that all domestic employment, as above defined, should be left under the system at present in force in workshops, as we think it desirable to interfere as little as possible with the habits and arrangements of families."2 inconsistencies of these various pronouncements were too much for the O'Conor Don, who prepared a separate report, in which he urged that "the work carried on in these places (i.e., ordinary workshops) is just of that character that it can, with the greatest facility, be transferred from the workshops to the homes of the people. . . Dressmaking, tailoring, boot and shoe making, seaming, glove making, and a host of other workshop employments, can all be carried on in the homes of the workpeople. They are to a great extent so carried on at present and under conditions of labour far more injurious to the working people than if carried on in workshops, and the undoubted effect of any further unnecessary restriction on the hours of women's labour would be to drive the work out of the workshop into the dwelling-house." The point of this separate report was that work in factories in connection with machinery could not be carried on except with the assistance of the machinery, while work in workshops could be readily transferred to homes; ergo, there is competition between homes and workshops, but none between workshops and factories. This rather leaves out of sight that in most factory work there are subsidiary operations, such as the "finishing" and mending of hosiery or lace, for instance, which are done quite independently of machinery. The O'Conor Don's report is more consistent than the Commissioners', but the evidence he quotes is a demonstration rather of the need for strengthening the control of homework than relaxing that over workshops.

¹ H. C., 1876, XXX., p. xvii. ² *Ibid.*, p. xl. ³ *Ibid.*, p. cxi.

The Commissioners also recommended certain relaxations for the labour of women in workshops where no children or young persons were employed, and advised the retention of the existing provision giving power to employ women in fish curing and fruit preserving for fourteen hours on ninety-six days in the year. 2 Relaxations relating to overtime in certain trades "liable to emergencies" were recommended for inclusion in a schedule to the Act. These emergency trades included such manufactures as bricks and tiles, which are more or less dependent on the weather, occupations such as job-printing, millinery, dressmaking, and the like, in which a sudden press of work may occur, more especially, as the Commissioners very feelingly remark, "in connection with weddings and Court Drawing Rooms, and above all the funerals and mourning orders."3 "We trust in time that the use of overtime in trades of this class may be restricted down to the vanishing point; and we believe that not even in the most extreme case set before us, that for instance of a general Court mourning, is it absolutely necessary to the interests of society that those who minister to its wants should be overtasked to supply them. At the same time, we recognise that, at the present day, rigidly to enforce in these trades the rule of hours would probably result, only in part, in inducing customers to give more time for the completion of orders, and in part would drive work out of workshops to a greater degree than at present, to be done under no conditions of supervision or regulation in the ill-ventilated bedrooms of the workers." Weddings, funerals, and Court mournings are doubtless institutions that should be treated with all respect and considered sacred; but it is less easy to understand why the Commissioners included "shirt and collar makers, boot and shoe makers, bon-bon and Christmas present makers, valentine

1 Ibid., p. xvii.

² *Ibid.*, p. xli.; cf. 33 & 34 Vict. c. 62, schedule 2. *Ibid.*, p. xli.

⁴ Ibid., p. xlii.

makers, almanac makers and finishers, fancy box makers," as suitable subjects for relaxation and exemption.

It is gratifying to notice that the report recommended that the sanitary provisions of the Act of 1864, with the addition of provisions from the Public Health Act as to privy accommodation, should be made general, "except in dwelling-houses," which were supposed to come under the Public Health Acts.² The provisions relating to fencing of machinery were recommended for extension, and the somewhat absurd limitation of the requirement to those parts only of the machinery "near to which any child or young person is liable to pass or be employed," which had found a place in the Act of 1856, was advised for repeal.³

It was on these recommendations that the Act of 1878+ was in the main based. It got rid of the arbitrary distinction between factories and workshops as places where more or less than fifty persons were employed, and substituted for it the general definition of a factory as premises where any articles are made, altered, repaired, ornamented, finished or adapted for sale by means of manual labour exercised for gain, if mechanical power is used on the premises, though some works, enumerated in the Fourth Schedule, Part I., were included as non-textile factories, whether power is used or not. The workplaces to which the Act applied were classified as five: (1) Textile factories, which were and still are restricted to somewhat shorter hours than others; (2) non-textile factories; (3) workshops in which children, young persons, and women are employed; (4) workshops in which no children or young persons are employed (called women's workshops); (5) domestic workshops in which only the members of a

³ Ibid., p. lxxv.
⁴ As this Act is of great length and is easily accessible in the admirable text-books of Abraham and Davies, Evans Austin, or Redgrave, it is not considered necessary to give an abstract in the text.

Ibid., p. xcix.
 Ibid., p. ciii. For further details see below, Chap. XI.

family were employed. The conditions of employment in non-textile factories and workshops were assimilated, but were left very lax in women's workshops and domestic workshops, the period within which work might be done being from 6 a.m. to 9 p.m., in spite of the many years' experience which showed the impossibility of effectively enforcing the ten and a half hours day within this wide margin.

It will be noticed that the policy of the Act with regard to home-work shows a distinct retrogression from the comprehensive control recommended by the Commissioners of 1866, and aimed at by the Workshops Act of 1867. We have now to go back a little and notice the phenomenon that, at the very moment when the principle of the Factory Acts was becoming more entirely accepted than ever before, when the growing interest in education, in sanitation, and in the condition of the working classes, had in great measure broken down the old commercial and self-interested objections of the employers, there came a reaction, a "throw-back" against that important class of restrictions that related to the employment of women. Exactly how and when this movement began it is difficult now to ascertain. It would seem to have originated in a certain confusion between the social and customary disabilities which have been placed on women's work in the professions connected with their own class, and the restraints placed by law on the overwork of women in industry. There really is no parallel between the two classes of restrictions. The limitations of opportunity suffered by women of the professional classes have their roots deep down in class custom and social history, and doubtless were and are a distinct grievance, sometimes more and sometimes less keenly felt, according to the nature of the desired occupation. English professional men are quite as conservative of their privileges and as jealous of interference as the trade unions which they criticise with so much detachment in the daily papers, and it is

only after a tremendous struggle that women have won and justified admission even to that one of the professions for which they are most plainly endowed and fitted by Nature. Far otherwise is the case with women in the humbler walks of industry. Not exclusion, but exploitation, is the trouble here. Women have their share, and more, of the hard manual and unskilled work of the world; they are not denied the "opportunity" of exercising their muscles as their better-off sisters were or are of exercising their brains; and the relative cheapness of their labour caused them to be eagerly seized upon by the machine industries and the factory system. But unfortunately the agitation which began in the 'seventies and has been continued to our own day, though no longer in a very enthusiastic fashion, has always been more or less dominated by this middle-class preconception of the woman being denied her "opportunity." It was true that the woman with her living to earn had her grievance in being restricted to the one overcrowded profession or teaching; it was equally true that the well-off woman of leisure had hers in being denied an outlet for her energies, or restricted to the uninspiring and mediocre ideals of her own class; numbers of intelligent and half-educated girls have rightly enough recoiled from spending their best years in idleness or in unavailing efforts at "doing good" à la Lady Bountiful. The mistake that some of them have made is in transferring their own grievance to a class whose troubles are little known and less understood by them; in supposing that while they pined to spend themselves in some "intolerable toil of thought," Mary Brown or Jane Smith should also pine to spend herself in fourteen hours a day washing or tailoring. Work was their watchword. The employment of women in some hitherto unaccustomed species of labour was apt to be hailed as a sign of "progress," when it probably only meant that it was cheaper to employ women than men. Miss Blackburn says indignantly in her tract on "Women's

Work and the Factory Acts":--"It appears that the chief temptation of the British workwoman is to work too long, to be too ready to give up holidays. That which has hitherto been regarded as a virtue has been turned into an offence." But precisely! The social conscience has travelled beyond the point at which exhausting soulless toil is regarded as a "virtue," it recognises the danger of intolerable strain both to women themselves and to their actual and possible offspring, and it sees in the frantic efforts of the unskilled, unorganised woman to work for impossible hours, to undersell her competitors and lower both her and their standard of life, an "offence" which, however pardonable in an individual, must in a member of society, by some means, be controlled or prevented for the general good. We cannot discuss these matters on purely individualist lines, as if, in a complicated society like ours, anyone could work for himself alone without affecting others. The one worker, whether man or woman, who works excessive hours sets the pace, compels others to work long hours also, and inevitably lowers the rate of pay for all. There is no parallel between suicidal competition of this kind and Carlyle's gospel of work, any more than there is between legal regulation of women's hours and social exclusion from certain occupations.1

From 1844 to 1878 "women" (defined as female persons over the age of eighteen) were under the Factory Acts subject to the same regulation as to hours, meal times, &c., as "young persons." In the discussion over the Bill of 1874 Mr. Fawcett moved to exclude women from the operation of the Act altogether, on the ground (among others) that the decision of the time for leaving work, or working at all, "ought to be left to the good

¹ See "Die Frauenfrage," by Lily Braun, Leipzig, 1901, p. 463 and ff., also "Archiv fur soziale gesetzgebung und Statistik," Vol. VIII., part 4, 1895, for an interesting discussion of this subject. The situation of working women, in this writer's opinion, is a labour, rather than a sex question, and it is a tactical blunder for them to combine with women of another class against the men of their own.

sense and increasing intelligence of the people themselves." He also denied that the conditions of work or health of the women employed in textile industries were such as to need interference. This argument was neatly turned against him by Mr. Evelyn Ashley, who pointed out that there could be no better testimony of the value of past Factory Acts than the fact that nothing startling or harrowing was to be found in the medical evidence brought before the Commission. 1 Mr. Fawcett returned to the charge on June 23rd, and said "there was something worse than work, and that was want." He accused the men's unions of trying to exclude women from employment, and asked how were women to live if the men would not recognise their right to work? His amendment "to omit the word woman" was lost by 242 votes to 59.

It is impossible not to be amused at the situation between the trade unionists and the Liberals in 1873 and 1874, as described by Mr. and Mrs. Webb,2 and the incident is one of those bits of genuine comedy that occasionally light up the somewhat dreary controversy of the Factory Acts. The Factory Acts Reform Association wanted shorter hours for themselves, and scouted the idea that legislative interference with adult male labour was an economic error. They, however, dreaded the prospect

¹ Hansard, June 11th, 1874. ² History of Trade Unionism, p. 296. Twenty years later the Cotton Factory Times, May 26th, 1893, gave a very frank explanation of the incident. "Cotton operatives have been able, through the influence of their trade unions, to secure shorter hours of labour, but the manner in which such concessions have been obtained from Parliament has been of a character which the promoters of the movements never dared make public; but now the veil must be lifted, and the agitation carried on under its true colours. Women and children must no longer be made the pretext for securing a reduction of working hours for men; the latter must speak out and declare that both they and the women and children require less hours of labour in order to share in the benefits arising from the improvements in productive machinery. The working hours cannot be permanently reduced by trade union effort, and as proof for this we need go no further than the cotton industry, where the employers require an army of Government inspectors to prevent them from working the operatives contrary to the regulations laid down by law."

of going to the House of Commons for an avowed restriction of men's hours. Nor was it necessary from their point of view to do so. Any effective limitation of the working day of factory women and children could not fail to shorten equally the hours of the male operatives working with them. Their Bill was therefore so drafted as to apply only to women and children, and the benevolent public was appealed to for sympathy. But they could hardly have reckoned with the fact that the women's unions, being largely dominated and controlled by ladies of pronounced Liberal views, would be, and were, arrayed against the Bill, which was denounced to the middle-class public, who mostly knew no better, as an attempt to supplant women's work by men's. The real fact was, of course, as even The Times 1 pointed out, that the men's unions aimed, not at the exclusion of women in order to work longer themselves, but at the virtual shortening of their own hours by setting this law in motion for the women.2

There the subject rested for a time as far as Parliament was concerned, but the party adverse to regulation of women's labour was not idle. The women's unions were at this time under the dominant influence of Mrs. Emma Paterson, who was an ardent promoter of educational and sanitary science, and of the enfranchisement of women, both politically and socially. Although favouring the Factory Acts as far as they dealt with the restriction of child labour and with the enforcement of proper sanitary conditions in factories and workshops, Mrs. Paterson was convinced that the limitation of women's hours of work was prejudicial to their opportunities of employment. With this end in view, she headed a deputation that came before the Factory and Workshops Acts Consolidation Commission in 1876, and edited a

¹ June 13th, 1873. ² Mr. Fawcett at times appeared to recognise this; see, e.g., Hansard, June 11th, 1874; cf. supra, Chap. IV., p. 65.

magazine, "The Women's Union Journal," in which many articles and notes to the same effect appeared. Another magazine, "The Englishwomen's Review," still in existence, worked stoutly for "the cause." In 1878 a kind of crusade was led against the Consolidation Bill, and over and over again in Committee came the amendment by Mr. Fawcett, Mr. Muntz, the O'Conor Don, and others, "to omit the word woman," in the various clauses of the Bill. None of these were accepted as far as factories, textile or non-textile, or ordinary workshops were concerned (i.e., those employing children and young persons as well as women). But in "women's workshops" (that is, those employing no children or young persons) a laxer system was permitted and endorsed. Domestic workshops, according to the Bills introduced into Parliament in 1877 and 1878 respectively, were to be put under a certain amount of control as to hours—that is to say, the young persons and women were to work only ten and a half hours per day, and might work between 6 a.m. and 9 p.m. Even this not very stringent measure was attacked as regards women, and here Mr. Fawcett's party scored a distinct triumph, for the word "women" was cut out in Committee. One of the arguments used by Mr. Fawcett with respect to women's employment in workshops was, that if the proposed restrictions were made, the employer would say to himself, "I won't be bothered with employing women," and would not employ them. Only two years before Mr. (afterwards the Right Hon.) Joseph Chamberlain, himself an experienced employer of labour in Birmingham, preeminently a centre of women's industry, had shown before the Commission of 1876 that this idea was fallacious. He stated that women's wages in Birmingham had considerably increased, perhaps by as much as 20 or 25 per cent., within ten years—that is, within the period that the limitation of hours had been extended to the trades most characteristic of Birmingham. However, no one appears

to have cited any of his evidence during the debates on the Consolidation and Amendment Bill of 1878; and on the whole it would seem that public opinion was somewhat shaken by the new arguments of the individualists, and was even inclined to sit in sackcloth and ashes. This is the note of a curious article in the Saturday Review for March 2nd, 1878: "Philanthropy no longer spoke with a certain sound . . . it had come to be doubted whether we were not subjecting women to disabilities when we thought we were protecting them. It might be very well, where there was a husband or father, to restrict the woman to home employment, but what if large numbers of women have to shift for themselves as completely as men have? This consideration introduces a wholly new element." (!) The discovery that there actually are single women and widows who work for themselves and for others dependent on them can hardly have been "new" to most people even in the 'seventies; but it was a pity that the Saturday Reviewer, having once started on his voyage of discovery, did not enquire whether the women who had "to shift for themselves" usually got better pay under the Factory Acts or outside their range. The article, however, seems a very fair index to the kind of thing that amiable cultured people probably thought and talked at the time. The "women's rights" opposition was confined to a small set; the old-fashioned bitter commercial opposition was out of date; on the other hand, the enthusiastic optimism of earlier reform movements had waned, and the benevolent public was as well disposed as ever, knew as little of industrial life and wages as ever, and consequently could not give a reason, even a bad one, for the faith that was in it.

The evidence given on this subject before the Commission of 1876 had been conflicting. Working women and philanthropic ladies came up to protest against "any interference with adult labour." The Working Women's Protective

¹ Minutes of Evidence, H. C., 1876, XXX., p. 641 and ft.

and Provident League resolved almost unanimously to a similar effect, and the Commissioners were urged to recommend the amendment of the Acts "in the direction of repeal rather than of further restriction." Mr. Joseph Chamberlain and Mr. Arthur Chamberlain, both Birmingham manufacturers in a large way of business, gave evidence,2 the one in favour of, and the other against the regulation of women's labour by law, the one demonstrating that the economic position of women was thereby improved and the demand for their labour increased; the other that their wages had risen little, if at all, and that "if there were no restrictions, women now getting their 8s. or 9s. would get 30s." The House of Commons, attacked on both sides, not unnaturally said, "A plague on both your houses," and compromised. The structure of factory legislation that had been built up for the protection of women's health and efficiency was not damaged in its main fabric, but suffered a breach in its weakest outworks—viz., the clauses relating to women's workshops and to women employed at home. A decade later the evidence given before the Lords Committee on the Sweating System in 1889 showed plainly that this lack of uniformity, so far from being an economic advantage to the woman worker, had served only to depress her wages. In women's workshops the ten and a half hours work could, under the Act of 1878, be taken at

² Minutes of Evidence. Mr. J. Chamberlain's evidence, Q. 5,249, &c.

Mr. A. Chamberlain's, Q. 4,954, &c.

¹ H. C., 1876, XXIX., App. E. 9. The Commission, however, while welcoming attempts to organise working women, seems to have recognised that such organisation as existed could hardly be considered genuinely representative of working women's views. "The trades unions which have been organised in London by benevolent persons," they remark, "are but sickly plants. . . While recognising the value of the movement as showing a desire on the part of working women to protect themselves instead of depending for protection upon Acts of Parliament"... and agreeing that new restrictions should be carefully watched, "we do not think the time is come either for altogether rescinding this section of the factory laws or for any serious modification of their restrictive provisions."

pleasure between 6 a.m. and 9 p.m., so that the inspector had no means of checking the number of hours worked. The woman who worked illegal hours in a woman's workshop might get perhaps 7s. for her work; another having a girl under eighteen in her shop must stop at 7 p.m., and might find she only earned 5s. 6d.; if she complained, she would be told, "Oh, Mrs. So-and-so can earn 7s."; and thus by breaking the law, the one woman would prevent the wages of the other being rated on a fairer standard. An inspector of workshops under the town council in one of our largest provincial towns told the present writer that he thought wages in small workshops had recently gone up owing to increased stringency as to hours by H.M. Inspector; "when the masters could work the women as long as they liked, they cut them down in their wages." It is necessary to go into these concrete details if the "case for the Factory Acts" is to be understood.

In 1891 the controversy again raged over the propriety of limiting women's hours in workshops and laundries.² But the opposition seems to have been weaker, and, no doubt, in consequence of the Report on Sweating, an important step was gained in the Act of that year by Clause 13, which required the period of employment in women's workshops to be a specified period of twelve hours between 6 a.m. and 10 p.m., instead of leaving it to the employer's pleasure. In domestic workshops, however, women's work still remains totally unregulated.

In 1895 Mr. Asquith's Bill met with renewed opposition on the part of the women's rights party and the Society for Promoting the Employment of Women. Their views were voiced in Parliament by Mr. Stuart Wortley, who boldly challenged the right of the House to interfere with the labour of an unenfranchised class.

¹ C. Hoare's evidence, Q. 22,936.

² See debates in Hansard, especially an interesting discussion in the House of Lords, July 13th, 1891.

(He did not explain, by the way, whether he proposed to advocate the repeal of all other legislation affecting women or other unenfranchised classes.) He contested the clause giving power to the Home Secretary to prohibit the employment of protected persons in dangerous trades. This had been done on the recommendation of the White Lead Committee, and women were excluded by the Bill itself from certain processes of the manufacture. The champions both for and against the so-called freedom of women were well represented at Nottingham at the National Union of Women Workers in 1895, where it was pleaded, on the one hand, that there was "terrible injustice" in thus legislating for the poorest and most helpless class of the community; and, on the other, "who so much as the poor and helpless needed the protection of the law?" It must be owned that arguments of this rhetorical nature are not satisfactory. Anyone can assent to general statements that the law ought not to do "injustice" to the weak, but ought to "protect" them; what we want to know is whether the particular regulation in question tends to "injustice" or to "protection." And we come then to this significant fact. Since 1833 the opposition to the Factory Acts has in great measure restricted its area, limited its scope, and softened its tone. The regulation of children's labour is accepted by almost all. The regulation of adult labour, so far as provisions for health and safety are concerned, is accepted by almost all. Even the limitation of women's hours is no longer seriously attacked as far as work in factories or better class workshops is concerned. The opposition has been gradually driven to abandon one position after another, until, by a curious irony of fate, it comes about that it is precisely in those industries that are most unregulated that regulation is made a bugbear. It used to be pleaded in the 'seventies, as we have seen, that the movement for regulation of women's labour was inspired and initiated by the men's unions, who were supposed

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to be jealously desirous of supplanting women in their employment. When it was pointed out that men were earning higher wages and working shorter hours than women, and therefore had nothing to gain by "supplanting" them, a sudden change of front occurred. Several ladies of the Women's Liberal Federation wrote to the Daily Chronicle 1 to explain that they were not afraid, "as you suppose," of women being supplanted by men who were earning higher wages and working shorter hours; what they dreaded was the competition of "disorganised men," the unemployed, and men working irregularly. It is needless to explain to any one who knows the history of the movement that this was equivalent to the abandonment of one of the party's most cherished and frequently-used arguments. And it is surely extremely significant that whilst the attack on the regulation of women's labour has been fruitless in better organised industries-that is, in those which can make their wishes felt-it has taken effect precisely in those industries which are unorganised and collectively inarticulate. By the admission of the opposition itself, the women whose trades have been under State control for thirty, forty, or fifty years are now so strong, so efficient, and so well organised. that even those who most strongly disapprove of State control do not wish to withdraw it from them.2 Yet we are to believe that to those who are still working long hours, in insanitary conditions, State control would mean lowered wages, and perhaps ruin.3

In 1891, Lord Dunraven described in the House of Lords the result of a canvass of the laundries in different parts of London-an overwhelming majority of workers being in favour of inclusion under the Acts. In 1895 Mr. Asquith's Bill would have placed steam laundries

¹ May 16th, 1895.

² Hansard, July 13th, 1891. ³ See *Spectator*, May 25th, 1895, letter from Women's Liberal Federation in *Daily Chronicle*, May 16th, 1895, and recent tract by Miss Boucherett, "The Factories and Workshops Bill."

under the same regulations as non-textile factories, and hand laundries under those applicable to workshops, exempting altogether those employing only the members of a family. The reception of the clause by the trade shows that the general feeling was in favour of still stricter control, and of placing hand laundries under one uniform rule with the others. It was pointed out that a large steam laundry with a large trade cannot get its work done more speedily than a small hand laundry with a smaller but proportionate quantity of work; that hand laundries were not always small, nor steam laundries large-the former sometimes employing fifty to two hundred and fifty hands, the latter sometimes not more than twenty-it was unfair to handicap the one and exempt the other, and the exemption of laundries carried on in families would open the door to grievous abuse.1 One would have supposed that, "foreign competition" being the favourite bogey to frighten the promoters of a Factory Bill, opposition would not have been offered to the inclusion of an industry which is so little likely to be taken abroad as the laundry. But laundry work, being almost exclusively a women's industry, offered a great opportunity to the women's rights' party, and the agitation for control of laundries was ascribed by Mr. Stuart Wortley to "the general spirit of trade unionism, directed, not exclusively, and he did not believe anybody could pretend in a preponderating degree, by or in the interests of the women themselves."2 The middle-class dread of personal inconvenience also came in, the Women's Employment Defence League said that no Factory Act would succeed in changing the customs of the British public,3 and the difficulty of reducing hours in laundries was pronounced insuperable. The Tory Opposition revived the stale and obsolete Liberalism of

¹ See paragraphs in *The Times*, May 6th, p. 9, May 11th, p. 15, June 22nd, p. 15, 1895.

June 22nd, p. 15, 1895.

Hansard, April 22nd, 1895.

Fortnightly, May, 1895, p. 736.

thirty years before, and in the Standing Committee on Trade Mr. Chamberlain and Mr. G. Balfour voted for extending laundrywomen's hours to fourteen a day.1 Lord Salisbury and Mr. Jesse Collings² pleaded pathetically in Parliament against crushing out the small laundry. The result was the miserably inadequate protection afforded by Clause 22 of the Act of 1895, which fixed the weekly limit of hours at thirty for children, sixty for young persons and women; but allowed children to work ten hours a day, young persons twelve, and women fourteen.

It may, perhaps, be here noted parenthetically that Mr. Asquith's proposal to extend the prohibition of boys under sixteen working at night to the four or five trades which were still exempt was defeated, the age limit being merely raised from thirteen to fourteen. The provision of his Bill forbidding women and young persons to clean machinery in motion suffered the deletion of the word "woman." In each of these cases Mr. Chamberlain's vote was recorded against the Government, and in 1901, in spite of the enormous majority behind the Unionist Government, no improvement of laundry hours was obtained by the Factory and Workshops Act, while the extra hour's holiday on Saturdays was secured to textile workers by an amendment in which the Government was defeated. The raising of the minimum age of employment was carried in 1891 by a Liberal amendment to a Conservative Bill. It can hardly be said that the confidence placed by the workers in the industrial programme of the Conservatives of 18743 has been justified by subsequent events, and the rather interesting question occurs, whether the two parties have not made an exchange of policy on this subject.

What proportion of the factory code is due either of the great parties, which for so many years

Parliamentary Papers, 1895, X.
 Hansard, July 3rd, p. 144, and July 5th, p. 228, 1895.
 See *supra*, p. 175.

succeeded one another in the government of the country' would not be very easy to determine. Factory legislation is not really a political question, and only seemed to be so for a time because it happened to be taken as a countercry at the period of the Free Trade and Reform movements. Even then, as we have shown, the dividing line was not clear, and it is probably still less so now. It does, however, appear that, on the whole, the persons really interested in the reform of industrial conditions could get more help from the Tory party in the old days, while in more recent times the Liberals have been the more favourable of the two. The obvious explanation doubtless is that the particular class interests represented by Liberals in the early period have gradually come more and more to be represented by Conservatives. Something, also, is probably due to the fact that the modern Conservative has absorbed a good deal of the old-fashioned Whig individualism, while many Liberals are now more or less under the influence of socialistic ideas. The early Factory Acts were wrongly supposed by many to be of a retrograde tendency, harking back to the mediæval standpoint, while the whole series is now, rightly enough, seen to be latently socialistic.

It is, however, a subject for congratulation that the opposition to the Factory Acts has lost much of its bitterness, and is now mostly of a kind that better knowledge and better understanding would help to remove. The aversion that is felt towards interference with the hours and conditions of adult women is more doctrinaire than economic. The old-fashioned manufacturer wanted "freedom" to work children as long and as hard as he liked; the modern individualist wants "freedom" for the woman worker to work as long and as hard as she likes. The dread is, lest women should be ousted by men—surely the most visionary and fantastic of terrors! In the main,

¹ See, for instance, Mr. Herbert Samuel's book, "Liberalism": London, 1902, especially p. 94.

men and women do distinct work, in which there is no competition at all between the sexes; but in a mobile industrial society like ours, where the demarcation of employment is by no means fixed or permanent, there must needs be some shifting of boundaries, and no one can make himself acquainted with industry in its concrete forms without becoming aware of the fact that, owing to the development of machinery and other causes, there is a margin where women are constantly being called in to take over processes formerly done by men, and do therefore encroach upon them to some extent. The reverse process, however, the men taking over the women's work, is so rare as to be absolutely inconsiderable. The idea that "trade union jealousy" may cause women to be excluded from industry through and by means of the Factory Act, does not bear verification, for in well-organised industries it is the trade union that sets the pace, and trade union regulations require somewhat shorter hours than those permitted by the Act. The trade union supports the Act for women and children because these last do not, or cannot, combine for self-defence, and their competition in the absence of a legal limitation of hours would continually lengthen the working-day for all. It even seems likely that shorter hours could and would by now be secured by trade union action, but for the relatively long hours permitted by the law. In spite of the "jealousy" of which at times we have heard so much, the fact remains that women have won their greatest improvements and most favourable conditions of work through the efforts of the men's unions, and in combination with them. The history and common sense of the matter is, as we have tried to show, that the trade unions have urged shorter hours by law for women and children, not in order to oust them as competitors and work longer themselves, but to secure shorter hours all round. The trade unions, whatever the faults in their economics or

¹ Cf. supra, pp. 65, 109, 175.

the lacunæ in their reasoning, have never fallen into the blank and unfruitful individualism that has blighted the women's movement in the middle class; and the working woman, we would submit, has a far better chance to work out her economic salvation through solidarity and cooperation with her own class than by adopting the tactics and submitting to the tutelage of middle or upper class organisations which rise to no higher conception of women's work than that of ceaseless competition with men, and blindly fight for a so-called "freedom" to carry on that competition by out-worn methods and in unhealthy conditions. The motives of the ladies who take this view are unquestionable; it is all the more regrettable that their neglect to make themselves better acquainted with the history and facts of the matter should cause them to inadvertently throw in their influence on the side of the sweater and the bad employer.

At the present time, as far as factory industry is concerned, the legal limitation of women's hours has become out of date, the usual hours of work being only nine or nine and a half a day. These are likely to be still further reduced. In such work as brass-stamping or pattern making, for instance, any master will explain the loss in economy of material and machinery that ensues from fatiguing the hands. Mr. Arthur Chamberlain, though himself an extreme opponent of legislative interference, requires only forty-eight hours work a week in the Kynoch Company's works, and considers the reduction of hours profitable to the manufacturer. At Mr. Cadbury's works at Bourneville the working day is only seven hours and forty minutes long. Can facts like these be known to the lady who recently told us in a letter to The Times, dated February 25th, 1902, that "enough has been done in the direction of hampering the labour market and making all trade groan under the restrictions of the grandmother who is so terribly abroad in the land"? After half a century's experience of these "terrible" restrictions, the best of the manufacturers, who may surely be supposed to know their own business, are found voluntarily reducing the working day to one, two, or even three hours less than the maximum permitted by law. In the lower class tailoring and dressmaking, on the contrary, and in the industries to which the Act has not yet been applied, or in which it is insufficiently enforced, we find that the long hours that characterised the factory industry fifty or sixty years ago still prevail, and are considered as indispensable in the laundry and small workshop as they once were supposed to be in cotton mills. The moral of this state of things is, the unsatisfactory nature of the commercial arguments generally used, and the desirability of having the whole matter thought out on grounds larger than the needs of any one class.

CHAPTER X.

REGULATIONS IN THE INTEREST OF HEALTH AND SAFETY.

1878-1901.

Dangerous Trades—The Sweating System Report—Lists of Outworkers—Particulars Clause—Shop Hours.

THE early factory movement, as we have seen, was an emotional, religious, charitable one. The long hours then commonly worked, the bad conditions then commonly endured in some of the factories, amounted to hardship and oppression that any sympathetic person could understand. Measures were tried for the relief of the symptoms. without much consideration being given to the causes to which the suffering from long hours and bad conditions were due. In later years society has been studied from a scientific (or shall we say, a quasi-scientific?) point of view, and it has become more and more evident that a great deal of ill-health, disease, and consequent waste of human life is due to preventable causes. More recently still, another idea has been working itself out, viz., that much of this disease and waste cannot possibly be got rid of by individual effort alone, but requires a concerted and thought-out attack from the reasoned sense of the community acting as a whole. The study of questions pertaining to public health seems to act as a solvent of academic scruples as to the liberty of the subject. Liberty for each man to carry on his business in the way that seems best to him may be a beautiful ideal, but what if it works out in practice that the said business becomes a centre of infection to other people? "An Englishman's house is his castle, of course; but no one has a right to

turn his castle into a Black Hole of Calcutta." 1 The Sweating System Report, the Labour Commission's Report, and the researches of Mr. Charles Booth and others have weakened the superstition about individual liberty as no amount of socialist theory could have done. Society shows an almost pathetic desire to be well and strong, if it may be; and has given expression to its craving in many ways, amongst them the various measures taken to extend the operation of sanitary regulations in industries. The transition stage is marked by the Act of 1878, which showed an amiable, if oddly directed, respect for the freedom of the "small master" and the "home industry," by expressly exempting women's workshops and domestic workshops from the provisions of the Act relating to "cleanliness, to freedom from effluvia, or to overcrowding," an absurdity which the investigations of later years has sufficiently demonstrated, and which subsequent Acts have done something to counteract. But, besides the enforcement of a certain standard of cleanliness and sanitation, there has come up the question of the dangers incidental to certain trades, which make it necessary to take specific measures to guard against specific diseases. We might describe the evolution of Factory Act regulations as starting from a vaguely benevolent and general type of enactment—the early Acts scarcely amount to more than a pious opinion that children should not be worked more than so many hours—and becoming constantly more particular, more detailed, and more scientifically directed.

The Act of 1864 was passed to deal with certain trades, supposed to be especially unhealthy, as pottery, lucifers, and some others; but no specific precautions were enacted beyond the very general provision of Clause 4, that "every factory to which this Act applies" should be kept in a cleanly state, and be ventilated in such a manner as to render "harmless so far as is practicable" any gases, dust, or other impurity generated in the process that might be

¹ D. Schloss in the C. O. S. Review, 1888, p. 10.

injurious to health. The occupier of any factory was empowered by Clause 5 to make special rules for compelling the observance by the workmen of the conditions necessary for cleanliness, which rules, when approved by the Secretary of State, were to be printed and hung up in the factory, with a penalty annexed for disobedience. These regulations were evidently of a tentative nature, and were intended to feel the way.

The Factory Extension Act of 1867 went a little further in the same direction. By Clause 8, children, young persons, and women were not allowed to take their meals in any room in which grinding or cutting glass was going on; by Clause 9 the inspector was empowered to require a fan or other mechanical means to carry off the dust generated by grinding, glazing, or polishing on a wheel. This provision was also included in the Workshops Act of the same year.

In 1878 the employment of children and young persons was forbidden in certain branches of the white lead and other factories. In 1883 an Act was passed requiring the occupier of every white lead factory (sec. 8) to draw up special rules, which were to be transmitted to the Chief Inspector of Factories for approval by a Secretary of State, who on his part was empowered to alter them as he thought fit, on giving sufficient notice to the occupier to enable him to state his objections, if any, to such alteration; and it was made unlawful to carry on a white lead factory (secs. 2 to 6), unless it was certified by an inspector to be in conformity with the schedule to the Act, which required ventilation, lavatory accommodation, baths for women with hot and cold water, a proper room for meals ("not in any part of the factory where work was carried on"), overall suits and respirators, and a sufficient supply of acidulated drink accessible to all persons employed in the factory. We may observe that it was already considered necessary and desirable to go into this considerable degree of detail.

Corresponding precautions have been enacted in the

case of certain trades where a dangerous degree of dust is generated, and also in the case of cotton industries, to provide against damp and vapour. In 1891 the Secretary of State (sec. 8) was empowered himself to draw up special rules when in his opinion any machinery or process or particular description of manual labour is dangerous or injurious to health, or dangerous to life and limb. A still more remarkable departure was taken by applying the sanitary provisions of the principal Act to men's workshops. In 1859 we find the Secretary of State authorised by sec. 28 of the Act of that year to make special rules or requirements prohibiting the employment of, or limiting the period of employment for all or any class of persons engaged in any dangerous process; and power to impose special rules was granted in regard to workshops in which only men are employed. In these apparently unimportant provisions, which at first sight read only like a trifling extension of regulations already enacted, the principle is, however, implicitly granted that, cause being shown, the protection of the law can be extended to men as well as to women and children. And it is worthy of notice that the opponents of special regulations for women are precluded from opposing hygienic regulations that apply to both sexes. From Mrs. Paterson's time onwards they have steadily declared themselves in favour of sanitary control, and opposed merely to special restrictions for women.

In 1896 we find a Departmental Committee, consisting of Mr. Tennant, M.P., Miss Abraham (afterwards Mrs. Tennant), Dr. Oliver, and Captain Smith, appointed to consider the "conditions of work as they affect the health of the operatives" in certain industries and processes. This Committee published some valuable reports on the dangers incidental to indiarubber works, wool-sorting, lead works, and many other trades, and various "special rules" were issued from the Home Office in accordance with the Committee's recommendations. The subject is

¹ Cotton Cloth Factories Act, 1889.

obviously one of great difficulty, as the conditions to be dealt with are sometimes highly complex, and the rules must be so definite as to be easily enforced, or they Further, we have to overcome not only are useless. the indifference of employers, but the inertia of the workers who are themselves exposed to danger. It is not, perhaps, necessary to dwell much on this latter difficulty, however, as it receives ample justice at the hands of certain employers as an excuse for their own negligence. As one of the lady inspectors has pointed out, when the washing appliances required by the Act are represented by a scanty number of basins, perhaps with no water, or water that has to be fetched from a distance, and with a "plentiful lack" of towels, &c., it is not so very surprising that wearied girls and women do not care to sacrifice their rest and meal-time to the duty of toilette. Superior persons are apt to wax very irate over the recklessness of working people, and to ascribe accident and disease more to fault than misfortune. Here, again, it is as well to remember that constant exposure to danger does tend to induce a certain recklessness—a merciful provision of nature that, for what life would be worth having, constantly in dread of an agonising death?—but, on the other hand, the vigilance of inspectors and employers has an educating influence, and precautions taken for the workers' benefit. even if at first considered inconvenient and distasteful, are sometimes gratefully accepted later on. It is evident that, especially in such matters as these, the tact and sympathy of lady inspectors is invaluable, and they do not disdain to spend time and thought over such matters as adapting of a "face-guard" or a respirator, and the persuasion ofsometimes refractory—wearers, in order to induce them to avail themselves of the means of protection.

A notable result of the diversion of State control of industry into this field of hygienic precaution, has been the increasing attention given to domestic workshops and

¹ Chief Inspector's Report for 1897, p. 102.

home work. As long ago as Peel's Committee in 1815, it was pointed out, probably with perfect truth, that while the proposal before the Government was to regulate the hours and conditions of children in cotton factories, the children employed by hand-loom weavers in their own cottages worked longer hours and under worse conditions. The same is still true of many industries to-day, and since the improvement of factory labour, the contrast has become more marked. The organisation of work into factories is complete only in a few trades; in others, there is a tendency for obsolete or semi-obsolete methods to "survive" as home industries, handicapped by the competition of the factory with improved machinery and appliances, and having hopelessly lost the advantages once enjoyed by the small master, or "domestic manufacturer." The file-cutting industry is a curious and interesting instance.1 At Sheffield this famous trade can be seen carried on after three distinct fashions, in the larger works aided by machinery, where the workshops are, on the whole, well constructed, and where there is sufficient cubic space, the better class employers being usually ready to adopt the suggestions of the Departmental Committee and do what they can to prevent leadpoisoning, the special and terrible danger of this work. But besides these there are the "small masters," who carry on their work in small, poorly-constructed outhouses, with deficient cubic space and inadequate ventilation. The customs of the trade are curious, and caused some debate between the Chairman of the Committee and the Secretary of State as to the legal position of persons working at it. In hand-cutting the worker is seated at what is known in the trade as a "stock," which consists of a stone block, into the centre of which a smaller steel block, called a "stiddy," is inserted, the surface of which is raised slightly above that of the "stock." The file is

¹ See Report of Departmental Committee, "Dangerous Trades," 1898, 1899.

placed upon the "stiddy" to be cut, each individual tooth being formed by a stroke of a heavy hammer on a chisel. "The owner of a shed or room lets out the 'stocks' contained in it to different persons; it is not unusual for each 'stock' to be rented by a different person. Each of these persons may be working for different firms. What is the nature of the place in which they work? If each of these persons is an 'occupier,' then is the 'shop' in which the work is carried on a 'workshop'? An essential qualification for a 'workshop' is that the employer of the persons working therein should have 'the right of access to or control over the premises, room, or place.' But in such a case, who is the employer with this right? The Secretary of State replied that the relationship of employer and employed must exist in the shed or room before it can be constituted a 'workshop.' When that relationship is found, the law as to workshops would apply; but it should be understood that this application is strictly limited to the part of the shed or room which is rented by a person who employs some one else. The following situation, therefore, arises:—In the same room are found workers, some subject to the law, others totally exempted; both classes may be working for the same firm; the physical and sanitary conditions of work are identical; the only difference is that some of the women or young persons rent their own 'stocks,' whilst the others work for a person who rents their 'stocks' for them. This is a condition of things which, in the judgment of the Committee, must be recognised as not only highly undesirable, but calculated to bring the law into ridicule. Where each of the persons engaged is the lessee of the 'stock' at which he works, no part of the place is a 'workshop,' and the only provision which could be applicable to such a place is the requirement as to the list of out-workers which has to be returned. no matter where the out-worker may ply his calling."1

Unfortunately, this exemption from the control of the

¹ 3rd Interim Report, 1898, p. 10, in H. C., 1899, XII.

law is enjoyed by a class of workers to whom it is most prejudicial. The dangers of file-cutting are aggravated by the conditions under which the work is carried on. The workshops are ill-ventilated, overcrowded, dark, dirty, and insanitary. Many of the shops appear not to have been built for the purpose, but to have been simply out-houses belonging to dwelling-houses, which in the absence of any control have been transformed into workplaces; they are frequently built against a blank wall, with a "shed" or sloping roof, so that through ventilation is impossible. In most of the shops, however, the cubic space is said to be now just sufficient to meet the requirements of the law, viz., 250 cubic feet, while a few years ago they were overcrowded to a much greater extent. The constant hammering and brushing of files causes large quantities of dust to be inhaled, and this dust is found to contain a "large proportion of lead, as well as chalk, charcoal, steel, and granite." The habits of the workers are incredibly dirty and reckless as to lead poisoning. The men have a habit of licking their fingers to hold the chisel, frequently eat their meals without washing their hands, and take dinner in the workshop where the files are cut, thus continually absorbing the poison.

Besides the "shops," in which several persons work together, though independently of each other, and besides the factories, where the conditions of work are usually better, the home is also used as a place in which the filecutter carries on his calling. The evils and risks connected with the trade are, according to medical evidence, accentuated in the case of the home workers, since these are generally persons reduced by poverty, occupying a house of the poorest description, without either the income or the will to secure proper cleanliness. Many of them are women who have learnt the trade before marriage, and afterwards eke out their means by continuing to carry on

¹ 4th Interim Report, p. 16, in H. C., 1899, XII. ² 3rd Interim Report, 1898, p. 10.

the trade in the intervals of domestic duties. Dr. Inkster, who reported in 1899, said that, "an outsider can form no idea of the amount of suffering, disablement, and premature deaths caused by lead poisoning among such workers." In his opinion nothing would stop lead poisoning among the small shops and home workers but the stoppage of the trade, which fortunately is being rapidly achieved by the introduction of machinery. There is, perhaps, no clearer case than that afforded by this industry of the need for enforcing and extending the provisions of the Factory and Workshops Act, so as to hasten the evolution of the industry, and the adoption of improved methods. At present the ordinary provisions of the Acts as to ventilation and cubic content, meal-times, holidays, abstracts and notices do not apply to domestic workshops, nor can special rules be enforced in them.2 Homes used by adults as work-places are under no regulations as to hours. Even where children and young persons are employed in them, if the labour is exercised at irregular intervals and "does not furnish the whole or principal means of living of the family," the room or rooms is not considered a workshop. It will be seen that while public opinion has become relatively advanced as to the degree of "collective control" it will sanction in the interests of public health and for the prevention of diseases attendant on certain trades, the law is stultified and rendered useless by the scruple as to interfering with "the home" which is still crystallised in the various legal exceptions and exemptions to be found in the Act. law, in fact, is still ostensibly based on the idea of "protection for those who cannot protect themselves," instead of openly and avowedly adopting the more fruitful

1 4th Interim Report, p. 26.

² Since writing the above the Act of 1901 has come into operation. By 1 Edw. VII. c. 22, sec. 112, if any occupation which is certified by the Secretary of State to be dangerous is carried on in a domestic factory or a domestic workshop, all the provisions of the Act apply as if the place were an ordinary factory or workshop. It must be noted that file-cutting has not yet been certified as a dangerous trade.

principle of raising the standard of life and health for the common good.

We cannot go here into detail on the subject of all the "dangerous trades" which have been enumerated as such under the Act. Ample information on the subject can be found in the reports of the Departmental Committee since 1896, in the Inspectors' Reports, in Dr. Arlidge's work on "Diseases of Occupations," and other similar works.¹ The Women's Trade Union League have made a special study of the lead-poisoning in the potteries, and many articles on the subject can be found in their Quarterly Report.

We may here mention an admirable provision of the Act of 1878 (sec. 82), according to which the fine for neglecting to fence machinery might be applied to the benefit of a person injured by such neglect, or of his family. The Act of 1895 (sec. 23) extended this provision to docks, wharves, quays, and warehouses, and to premises where machinery is used for building purposes. A similar provision was made with regard to neglect to observe the special rules for dangerous trades. The present tendency seems to be towards the inclusion of male workers, at all events in regulations that have technically to do with health; and it may be hoped that this beneficent process will cause the whole question of labour regulation to be re-studied on larger issues, and will help to rob the opposition to special regulations for women of its bitterness.

Among provisions in the interests of health and safety, we must here note Clause 17 of the Act of 1891,² which ran thus: "An occupier of a factory or workshop shall not knowingly allow a woman to be employed therein within four weeks after she has given birth to a child." In 1873 Dr. Bridges and Mr. Holmes, whilst inquiring into the conditions of women's employment in the textile districts, had been impressed by the risks and dangers incidental

¹ Since the above has been in proof, a large and important work on the subject of "Dangerous Trades" has been edited by Dr. Thomas Oliver. See Appendix D.

² Now incorporated as Clause 61 of the Act of 1901.

to infant life, where the mothers were accustomed to work in factories. They had recommended that some arrangement should be made by which mothers of young infants should either be employed half-time, or be excluded for a time from the factories altogether.1 But the Commissioners of 1876 declined to recommend any legal restriction on the work of women either before or after confinement, not that they underrated the existing evils. but because they considered it "out of the question to charge the inspectors with the duty of enforcing any such restriction."2 In 1891, however, the Government introduced the clause above quoted into the Factory Bill of that year, in accordance with a promise made at the Berlin Conference.³ This clause was supported by Mr. Sydney Buxton and other members of the Liberal Opposition in the Commons, but was strongly opposed in the Lords by Lord Wemyss.4 He acted as the spokesman of the women's rights party, and produced evidence intended to prove that the clause was unnecessary, as many women were capable of returning to work in a period less than the four weeks prescribed, and that it would result in great hardship to widows, deserted wives, and unmarried mothers who were compelled to work for their living. Lord Wemyss revived the arithmetical argument of Senior and the older economists, and suggested that the clause would take away "literally one-twelfth of a woman's earnings in the year." Lord Salisbury pointed out that none of these arguments were germane to the real issue

¹ Report to Local Government Board, H. C., 1873, LV., p. 61.

² H. C., 1876, XXIX., pp. lxxvi., lxxvii.

³ The Berlin Conference was convened in March, 1890, by the German Emperor, who invited the Governments of England and some other countries to enter into an international discussion for the purpose of coming to "an agreement on the more important questions concerning the welfare of the working classes." Among several resolutions relating to the regulation of the labour of women and children, one was to the effect "that women after child-birth be not admitted to work for four weeks after their delivery." Parliamentary Papers,

^{1890,} LXXXI., pp. 531, 613.

4 Hansard, Feb. 26th, 1891; July 23rd, 1891.

involved, which was the interest of the child. The clause became law, but there can be little doubt that it is practically inoperative. The inspectors are not supported by the women themselves, who are impelled to return to work as soon as possible, for fear of losing their place. The clause is therefore difficult to enforce, and must be regarded as a hopelessly inadequate safeguard of that which Lord Salisbury indicated as the true object in view, namely, the care and nurture of the infant. The difficulties of initiating further and more drastic legislation under this head are so obvious that they need not be pointed out here. As it stands, the clause must be regarded as ineffective for the end in view, but may, it is to be hoped, have some educational value as an affirmation that the State has, at least, an opinion on the subject of the deplorable waste and neglect of child life characteristic of most industrial districts.

We have hitherto done no more than allude to the important report of the Lords' Committee on the Sweating System. Although the Factory Acts have hitherto expressly exempted home work from any but a lax control as to hours and conditions of labour, the last decade of the nineteenth century witnessed a kind of awakening to the idea that it might be necessary in the interests of public health to exercise some stricter supervision over outworkers employed in their own homes. This conclusion was not reached all at once; some considerable study has been given to the subject in recent years, and the indignation aroused by the oppression of the sweated, their miserable pay, their long and irregular hours of work, has resulted in indirect measures, which might at first sight seem very wide of the mark as far as these particular sources of misery were concerned.

In 1884,¹ much attention having been drawn to the condition of the workshops in which various occupations, and especially tailoring, were carried on in the East End

¹ See Chief Inspector's Report for that year, p. 35 and ff.

of London, the inspectors undertook a special inspection of these places. Many of these were rooms in dwelling houses, and in the course of a house-to-house visitation, instituted with a view to ascertaining the sanitary condition of these workplaces, three inspectors, Messrs. Lakeman, Vaughan, and Snape, amongst themselves visited 1,478 workshops. In as many as 724 out of the 1,478 the inspectors had no jurisdiction whatever, and in 387 others no jurisdiction over the sanitary conditions, which were under the control of the local authorities. It was found that in 907 of these workshops improvements were required, and full details of the defects discovered were sent to the local authorities of the respective districts, and a further inspection by local officers was set on foot.

In 1887 the Chief Inspector in his report 1 again called attention to the evil. Workshops in which no motive power was used, and only male adults were employed, were still expressly exempted from all the enactments of the Factory Act. Workshops in which women, but no children or young persons were employed, were only partially affected by the factory regulations, as the sanitary enactments and the exhibition of an abstract of the law did not apply, and the regulation of hours, as already explained, was so lax as to be almost useless. But it began also to be more clearly realised that the worst evils were those existing, not in the factory or workshop, but in the workplace that was not, properly speaking, a workshop at all—a mere room or rooms in a dwelling-house, utilised, but not really adapted, for industrial purposes. As in the enquiries into dangerous trades, it was seen that while the special provisions for health and safety could be enforced without much difficulty in the factory, with somewhat more, but not insuperable difficulty in the workshops, while they remained practically a dead letter for the home-workers, so with the East End industries which claimed so much intermittent interest in

¹ H. C., 1888, XXVI., p. 72.

the 'eighties and 'nineties. The better masters, employing forty or fifty people, might have "good regular work, fair prices, cheap labour, and large profits"; but with the smaller sweaters, in the vast majority of cases, work would be carried on under "conditions in the highest degree filthy and insanitary. In small rooms not more than nine or ten feet square, heated by a coke fire for the pressure irons, and at night lighted by flaring gas jets, six, eight, ten and even a dozen workers may be crowded," in complete disregard of the Factory and Public Health Acts. It was reported that the existing systems of inspection were "entirely inadequate . . . even if no divided authority tended to weaken the hands of the inspectors."1 But in the case of home-workers, the inspectors had not even the semblance of authority.2 The workrooms might be damp, dirty, redolent of bad smells, the backyard with its offensive dust-bin, and domestic arrangements all that was objectionable; but the inspectors had no power to enforce any improvements, and it is greatly to their honour that they seem at times to have achieved something by means of persuasion and influence. But the question was, what was to be done? It was easy to start a wave of popular sympathy with the underpaid and overworked, but very difficult to utilise the sympathy in any practical reforms. Public opinion was still, as indeed it probably is now, unconverted as to the possibility of inspection or control of dwelling-houses; and though desirous of "doing good," and no longer much hampered by the academic doctrine of liberty, was extremely nervous as to the economic effects of labour legislation on the workers themselves. It is often supposed that greater stringency as to sanitary measures or restricting hours of labour will increase the cost of production and raise prices, so that the sweated worker would presumably lose as a consumer,

¹ Report of Mr. Burnett, Labour Correspondent to the Board of Trade, on the sweating system in the East End of London, H. C., 1887, LXXXIX.

² Chief Inspector's Report for 1887, p. 73.

what he might gain as a worker by his improved conditions of work. The detailed investigations into the actual conditions of industry that have since been published by Mr. Charles Booth, Mr. and Mrs. Webb, and others, have revealed how groundless this fear is. Properly organised and efficiently conducted industry can turn out goods as cheaply as the miserably underpaid homeworkers, even in open market, and who shall measure the difference of cost to the community in life and health? This, however, was little understood even so recently as the 'eighties, and it is curious to study the utterances of public men in this connection. On February 28th, 1888, in the House of Lords, Lord Dunraven moved for the appointment of a Special Committee to enquire into the sweating system at the East End of London; and his lordship, well known as a supporter of Factory Acts and measures for the protection of women and children in industry, said that the "evils of the sweating system were but the fringe of a much larger question, perhaps the greatest of the problems of the present time, and that problem was whether, under the present circumstances of the world, under the extraordinary advance which science had made, and which enabled the inhabitants of different parts of the world and the products of their labour to be brought so easily and quickly together-whether under these circumstances it was or would long be possible for a manufacturing country like this to maintain its labouring population at a fair standard of decency or living without endangering the interests of its great manufacturing industries."

The mode of statement is a measure of the distance we have travelled since 1888, for probably almost any student of modern economics and social questions, if asked to rapidly read the above, would automatically insert a not, invert the clauses and read the whole as a question whether this country would not "endanger the interests of its great industries" unless it could contrive to maintain its labouring population at a fair standard. The

disclosures of the Lords' Committee on the Sweating System showed, among other things, that so far from being socially economical or useful, the industries carried on in the workers' miserable homes were really dragging back the industry as a whole, competing unfairly with the firms carrying on business under factory law, and thus hindering these last from perfecting their methods and machinery. Thus we find the trade union officials who gave evidence before the Lords' Committee strongly in favour of placing the chain and nail makers' domestic workshops under the inspectors. "If a man goes and lays violent hands upon himself and attempts to commit suicide, then comes the strong arm of the law upon him; but a man may stop and work at home and bring on a suicidal death, and may be gradually committing suicide and worse than suicide, and they do not interfere." 1 It does not appear, by the way, that the working classes themselves regard the inspectors' visits with the aversion and dread that the upper class world supposes them to inspire.2 However this may be, it has gradually become evident that factory law is hopelessly incomplete as long as the home-workers are free to make their workrooms the centres and their products the disseminators of dirt, infection, and disease. In 1891 Mr. Matthews excused himself for exempting domestic workshops from the sanitary provisions of his Factory and Workshops Bill, with the remark that "in the domestic workshop you have not got the presence of employer and employed, you have the members of the same family . . . " adding that it seemed to him we might allow a man and his family "to work in a place which is sufficiently good so far as sanitary conditions are concerned for him and his

H. L., 1889, XIII., Q. 18,307.
 The present writer has been privileged to accompany an inspector of workshops and a lady health visitor on their respective rounds, and is inclined to put a very high value on the educational influence of similar visitations in raising the standard of cleanliness and decency. A great deal can be done by suggestion and persuasion when it is known that in the last resort the law can be put in force.—(B. L. H.)

family to live in"; but he was instantly met by the rather frivolously worded but unanswerable question from Mr. Baumann: why, if a man chooses to employ in a workshop "his sisters, and his cousins, and his aunts," he is to be allowed to poison them with foul air and bad drains?1

There is yet another point of view from which the regulation of home-work must be considered—that of wages. The sensation that has been created at different times over the cruelly low wages of certain trades, the lowest class tailoring and underclothing, the nail and chain making and others, has left the public conscience in a vaguely compunctious mood, feeling that "something" ought to be done, but with no very clear idea what the something should be. Opinion is not yet converted to the legal regulation of wages, nor likely to be for a considerable time yet. And the investigations of the last two decades have repeatedly brought to light the fact that the "sweater" is by no means always—though he may be sometimes—the sort of typical hard, rich man, grinding the faces of the poor, and literally wresting his own wealth from the blood and sweat of his unfortunate employees, that the popular imagination at first supposed him to be. On the contrary, he might be, and often is, very little better off than those he employs, of much the same class, living with them on more or less friendly terms, and quite incapable of paying a generous or adequate scale of wages. It may seem to many of the benevolent and philanthropic-minded that the amendments of factory law suggested at this time were the very coldest comfort for low wages and poverty that could have been imagined. Notice to be given of the occupation of workshops, lists of out-workers to be kept,2 power to close a workplace found to be in an insanitary or dangerous condition³—what could all these

¹ See Hansard, Feb. 26th, 1891, col. 1735.

² Act of 1891. 3 Act of 1895.

do to check sweating? Would they not even diminish the workers' chance of earning a livelihood? 1

The answer to this question is to be found in a study of the actual conditions under which industry is carried on. As Mr. Burnett said in his report, already quoted, "The ease with which men can become sweaters greatly intensifies the evil. It is the desire of every man who works under the system to get into business on his own account. The number of sweating dens therefore increases with startling rapidity. . . . The contractors and subcontractors play the sweaters off against each other with a view to the reduction of prices, a process in which they are too generally successful." Conditions like these have again and again been urged in Parliament as a plea for relaxing the law; the exemption of this and that class of persons has continually been carried in the dread of throwing them out of employment. And it is quite true that to impose a minimum of air space, a minimum of sanitation, or to restrict the number of hours that may be worked, does cause a certain number of establishments to be shut up. The lowest class masters, those who have the least margin, who "do the commonest work, have the lowest prices, pay the least wages and exact the maximum of toil from their workers," 2 have to go. But there is not necessarily any narrowing of the field of employment. The community needs quite as many coats and trousers, nails and chains, as before, and has quite as much money to pay for them. There is therefore no reason why the discharged workers and the ci-devant masters, now disqualified, should not find employment in the shops which are able to reach the legal standard of health and decency, and yet pay better wages. Here is the link between the investigations of the Lords' Committee and the somewhat tentative provisions of the Acts of 1891 and 1895, which,

¹ Deputation from Women's Employment Defence League to the Home Secretary on the subject of home-work. See *Times*, May 21st, 1895, p. 12. *Ibid.*, p. 15.

at first sight, seem so lame and impotent a conclusion. They show a dawning recognition of the latent meaning of the various Acts that have been framed to regulate labour during the century. That meaning is not—it can hardly be too often explained—a merely philanthropic one. A Factory Act is not something "given away," like coals or blankets at Christmas time. It represents, rightly understood, the reasoned effort of the best sense of the community to raise its industrial and social life to a higher plane. Failure to attain the standard set by the Act is equivalent to being ruled out as incompetent for the responsibility of employing others. And the experience of a century shows how necessary it is that some such standard of fitness should be set. The extreme inequalities of wealth, immigration of destitute aliens, the necessities of women and children thrown on the world without a head of the family, all these and other causes provide a constant supply of cheap labour which can be exploited because it is practically unable to organise itself for resistance or self-defence. The hardships of the parish apprentices of a hundred years ago were only extreme instances, as Sir Robert Peel found out, of what occurs continually under competitive conditions, unless checked by wise measures of safeguard. Cheap labour—labour, that is, which can be employed under conditions and paid at a rate sufficient only for the needs of the moment, and less than sufficient for the maintenance of the race in health and efficiency—makes it possible for the incompetent to set up in business as an employer, and the result of responsibility being thus placed, unchecked and unchallenged, in the hands of the unfit, is usually the physical and industrial deterioration of those they employ. 1 But the enforcement of a decent and sufficient standard of sanitation, &c., weeds out the unfit, and places the control of industry more and more in the hands of the

¹ See a discussion on "Parasitic Trades," in "Industrial Democracy," by Sidney and Beatrice Webb, p. 749.

relatively competent. It is hardly necessary to say that we have by no means as yet reached this point, but there is no doubt that the Act of 1891 initiated a new departure, which, if followed up, may lead to most beneficial results. The improvement need not be confined to the matters actually touched by the Acts. The driving more business out of the sweating dens into the hands of the better masters, as Mr. Schloss pointed out,1 is likely to "bring in its train, among many other advantages, a higher scale of wages, hours of labour less unreasonably protracted, and greater regularity of employment."

The regulations made for out-workers are now as follows: By the Act of 1891, every occupier of a factory or workshop (including men's workshops) must, if so required by the Secretary of State, keep lists of all persons employed by him, whether as workman or contractor, in the business of the factory or workshop, outside the factory or workshop, and the places where they are employed, and every such list must be open to the inspection of the factory inspector and the officers of the local sanitary authority. By the Act of 1895,2 the list must be not only kept by the occupier, but sent to the factory inspector. By the Act of 1901 the occupier or contractor is required to send lists to the district council in which the factory or workshop is situated, and the district council to forward names and addresses of out-workers employed for firms within its district to the council of the district where such out-workers are resident. These regulations represent, as Mrs. Tennant and Mr. Davies remark, "the first attempt to deal effectively with sweaters' dens." By them the occupier or contractor was made responsible for the condition of the places where work given out by him is done, and if the inspector certifies such place to be dangerous or injurious to the health of the persons employed, on one month's notice being given, the

¹ Charity Organization Review, 1884, p. 11. ² Sec. 42, sub-sec. (1).

inspector may proceed against the occupier, and a Court of Summary Jurisdiction may, on conviction, fine him f.10. Giving out wearing apparel to be made, cleaned, or repaired in a house where any inmate is suffering from scarlet fever or small-pox rendered the employer liable to a similar penalty.

Perhaps a still more remarkable attempt was made by sec. 24 of the Act of 1891, which was replaced by the more elaborate and comprehensive sec. 40 in the Act of 1895. By this clause, known as the "Particulars Clause," the occupier of a factory or workshop is required to furnish in writing particulars of the rate of wages to each worker, so that the latter may ascertain the amount of wages to which he is fairly entitled. This clause in 1891 applied to certain classes of workers in textile factories only, but it was extended in 1895 to all textiles, and might be extended to non-textile factories and workshops by order of the Secretary of State. It has, in fact, been thus extended successively in recent years to the making of certain articles of clothing, to the making of iron and steel cables, chains, anchors and grapnels, locks, latches and keys, felt hats, wholesale tailoring, and in 1900 to pens. Two classes of particulars must be supplied to the workpeople, particulars of rate of wages and particulars of work to be done. The particulars clause applies to all classes of workers without distinction, and though, of course, it has no direct effect in regulating wages, it acts indirectly as a check on sweating. In this connection we may here mention the Wages Board Bill brought in by Sir Charles Dilke and others in 1900, the object of which was to provide for the establishment of Wages Boards, with power to fix the minimum rate of wages to be paid to workers in particular trades. The Bill was especially intended for sweated industries in which out-workers are largely employed, and though it did not, of course, become law, and is scarcely likely to do so for some time to come, it is a very interesting

piece of history that it should have been introduced at all.¹

The regulation of hours and conditions of work in retail shops has been considered more difficult, and is still more backward than in workshops. In 1886 a Select Committee of Enquiry was held, before which evidence was brought that the hours of shop-assistants ranged in many places as high as from eighty-four to eighty-five hours per week, with disastrous effects, especially on girls and women; also that the hours in warehouses and wholesale houses were sometimes prolonged so as to cause considerable injury to health; also that in shops to which workrooms were attached, young women, who could not be employed in the latter beyond the statutory hours of the Factory and Workshop Act, are called upon to serve after their tasks in the workroom are finished. In shops used by the wealthier classes the hours generally appear to be shorter, but those frequented by the working classes are liable to be kept open very late, especially on Saturday. The shops frequented by better-off purchasers usually now close earlier than in former years, but the difficulty of dealing with the matter without unduly inconveniencing the working-class customer is undoubtedly great, though probably exaggerated, and it has stood in the way of any effective regulation of shop hours. weekly limit of seventy-four hours for young persons was fixed by the Act of 1886, but no interference with adults was considered advisable, in spite of the evidence of the injury to women's health caused by the long standing. The Act "remained generally unenforced and even to a great extent unknown."2 It was renewed in 1892, and the administration placed in the hands of local authorities. with power to County and Borough Councils to appoint inspectors.

¹ Bill 102 of 1900.

Report of Select Committee on Shop Hours Regulation, 1892, p. iii.
 In London, the London County Council.

Women have not so far been included in the provisions of the Shop Hours Act. While conditions have without doubt greatly improved in better class shops, in many quarters the hours are still a terrible grievance, and fraught with the worst possible consequences to health.1 The excuse is sometimes made that the work is less hard than in manufacturing industry. This may be true to a certain extent, but it leaves out of account that the attitude of standing, if maintained for any length of time, is quite as fatiguing as, and probably more injurious than, movements that involve more muscular effort; also that, after all, nobody's day is more than twenty-four hours long, whatever work he may do, and the mere fact that any particular work done is less heavy and strenuous than some other kinds does not ipso facto give the worker any more hours for rest, relaxation, or recreation. Some good has been effected by voluntary association for early closing, but it has to be remembered that voluntary effort of this kind makes it all the more tempting for the unscrupulous to remain outside the pale, and gain by withdrawal of others from competition. It is highly probable that the supposed inconvenience to the working-class consumer of early closing is more a matter of habit than necessity, and that if an uniform limit were applied, gradually reducing the hours that could be worked in shops, the habits of the community would adjust themselves to the change without involving any hardship or tyranny nearly so oppressive as that now endured by the employees themselves.

A clause in the Act of 1892 prohibits employment of a young person in a shop and in a factory or workshop on the same day for longer than factory hours.

¹ See "Death and Disease behind the Counter," by Thomas Sutherst, London, 1884, a useful little book which did much good in calling public attention to the matter.

CHAPTER XI.

ADMINISTRATION BY THE HOME OFFICE AND LOCAL AUTHORITIES, 1867—1902.

Recommendations of Children's Employment Commissioners, 1862—4
—Administration of the Workshops Regulation Act, 1867, by
Local Sanitary Authorities—Defects in the Act and Failure of Local
Authorities to undertake Inspection of Workshops—Administration of Workshops Regulation Act handed over to Factory
Inspectors in 1871—Recommendations of Commissioners of 1876
—Report of Select Committee of the House of Lords on the
Sweating System—Acts of 1891 and 1895—Dual Control—Inspection of Out-workers—Act of 1901—Extension of Duties of Factory
Inspectors.

In dealing with the administration of the Factory and Workshops Acts from 1867 to the present time, the chief interest centres round the various experiments which have been made with regard to the inspection of workshops; and the relative advantages of central and local control.

The Factory Acts Extension Acts of 1864 and 1867 extended the operation of the Acts from the so-called factory districts to the whole country, and brought under regulation not only mills in which machinery was used, but small workshops in out-of-the-way country towns, and even dwelling-houses and rooms used as workplaces. The question naturally arose as to how the law was to be enforced under these changed conditions. The Children's Employment Commissioners had faced the difficulty in 1864. They reported that the experience of thirty years' administration of the Factory Act had convinced them that "no administrative machinery could be suggested so efficient and satisfactory as the existing one of factory inspection." They therefore recommended that if the

¹ Children's Employment Commissioners, 3rd Report, H. C., 1864, XXII., p. 339.

expense were not too great, the law should be administered by the factory inspectors, but that as an alternative, the smaller factories and workshops should be placed under the supervision of the Medical Officer of Health and other sanitary officers of the Local Board of the district. They especially recommended this in the case of "private houses" in which the manufacture of lace, hosiery, straw plait and other industries were carried on. We have already seen 1 how far ahead of their time were the Commissioners of 1862-4, in that they advocated a modified system of protection, not only to children, young persons, and women employed in the so-called "mistresses' houses," and straw plait schools, but even to workers in "private houses" in which the parents were the employers of the children.2 They pointed out that hitherto "domestic manufacture" had been commonly thought to be "beyond the province of legislative supervision," partly owing to the tacit assumption that no evil accompanied it of "a nature sufficiently grave to involve the general interests of the public, partly that, even if such evil existed, the law could not reach it."3 This latter impression the Commissioners considered to be groundless, "since the Public Health and the Local Government Acts have placed under the direction of the local authorities all over the kingdom, officers who only required to be armed with specific power to deal effectually with cases such as these now in question."

But it is interesting to notice that the Commissioners were fully alive to the disadvantages of local control; and recommended it only "with reluctance and as an alternative." "We are not insensible," they said, "to the objections which may be stated to the administration of any portion of the Factory Acts by the local authority, objections arising from conflicting interests, local influences,

⁸ Ibid., p. xxxi.

¹ See Chapter VIII., p. 165. ² See 2nd Report of Children's Employment Commission, H.C., 1864, XII., p. xxvi.

indisposition to carrying the law into effect, and other circumstances."1

In 1864 the difficulty of administering the Factory Acts, owing to the increased number of places brought under control, was met by appointing an additional number of sub-inspectors acting under the directions of the district inspector of factories; but in 1867, when by the Workshops Regulation Act of that year, practically all "manual labour exercised by way of trade or for purposes of gain" was brought under inspection, the experiment was tried of making the local sanitary authorities responsible for the administration of the law in workshops.

Mr. Walpole, in introducing the Bill, explained that, if factory inspectors were appointed to supervise the whole of the trades to which the measure applied, "they would find it a matter of impossibility—so numerous are the workshops scattered over all parts of the kingdom-to discharge that duty with anything like efficiency."2 The administrative clauses of the Bill met with no opposition, and it therefore became the duty of the local sanitary authorities³ to enforce the Workshops Regulation Act.

This experiment, which lasted for four years, proved, with very few exceptions, to be a complete failure, and apart from the permissive nature of the Bill, this failure may be attributed to two causes, (1) the inadequate power given to the officers of the local authority, and (2) the indefinite nature of the regulations themselves. Before the Officer of Health or other inspectors under the local authority could enter a workshop, they had to obtain an order from a justice of the peace empowering them to do

¹ Children's Employment Commission, 3rd Report, H. C., 1864, XXII., p. 339.
² Hansard, March 1st, 1867.

³ The "local authority" varied from place to place. In large towns it was usually the Town Council, in other places the Police or Improvement Commissioners, or other Local Board, and in London it was the Vestry.

so within forty-eight hours from the date of issue of such order, and orders were only to be given when it appeared to a justice that there was reasonable cause for believing that the provisions of the Workshops Regulation Act, or of the Sanitary Act, 1866, were being contravened.

The factory inspectors and sub-inspectors, on the other hand, had the right of entry into workshops at any time. They had the same powers of inspection and examination as the officers of the local authorities, with additional ones as regards the enforcement of the educational clauses of the Factory Acts; but they had no power of prosecution.

Quite apart from the inadequate power given to the local inspectors, the Workshops Regulation Act was a very difficult one to administer. The Act is remarkable as an evidence of the neglect of legislators to learn from past experience, for its distinguishing feature is the absence of all those safeguards against evasions of the law, which had found a place in the Factory Acts from 1833 onwards. The Act did not require the sending of notices of occupation, the exhibition of abstracts, certificates of age or registers of persons employed, and though the period of employment was limited to twelve hours a day for women and young persons, and six and a half hours for children, the period for women and young persons might be taken at any time between 5 a.m. and 9 p.m., and that for children between 6 a.m. and 8 p.m. The Act required that one and a half hours out of the twelve should be given for meals, but the times were not fixed, and the

¹ The Workshops Regulation Act, 1867, contained no sanitary provisions. The sanitary condition of workshops was regulated by the Sanitary Act, 1866, which included under the definition of a nuisance "any factory, workshop or workplace . . . not kept in a cleanly state and not ventilated in such a manner as to render harmless as far as practicable any gases, vapours, dust, or other impurities generated in the course of the work carried on therein that are a nuisance or injurious or dangerous to health, or so overcrowded while work is carried on as to be dangerous or prejudicial to the health of those employed therein" (29 & 30 Vict. c. 90, sec. 19).

only provision with regard to education was that children must attend school for ten hours during the week, instead of for three hours a day, as was the case in factories. To those who have studied the administration of the Factory Acts before the establishment of the "normal day" in 1850 and 1853, the impossibility of enforcing such an Act is self-evident.

Moreover, the Act was a permissive one, it being left to the local authorities to enforce or not, as they thought fit. Even the largest municipalities at that time were incredibly backward in matters of sanitary reform. Except in a few large towns such as London, Liverpool, Leeds, and Bristol, medical officers of health were unknown. City Council of Manchester did not appoint a medical officer until 1868. The staff of sanitary inspectors was everywhere inadequate for the work which lay before them, and as no pressure was brought to bear by the central authority, either directly, or by the indirect method of grants in aid, it is little wonder that the members of the health and sanitary committees of the town councils, who were often themselves owners and occupiers of workshops, did not bestir themselves in the matter; and the Workshops Regulation Act remained in consequence a dead letter.1

The factory inspectors did all in their power to arouse the local authorities to a sense of their duty. Mr. Redgrave reported that the administration of the Workshops Regulation Act had been "the cause of very great anxiety" to him and to the members of his staff:—"In the course of our duties we found, side by side with factories in which we had to insist on the cessation of work at 6 p.m. and the attendance of children at school,

¹ See return made to the House of Commons, March 3rd, 1870, showing the "boroughs and districts in which the Workshops Regulation Act has been enforced by the local authorities . . . also the boroughs and districts in which the local authorities have refused or neglected to enforce the said Act." Parliamentary Papers, 1870, Vol. LIV., p. 555.

workshops in which such regulations were not only disregarded, but not even known. We could not silently pass by such a palpable anomaly. . . . From the passing of the Workshops Regulation Act in 1867, the members of my staff have been assiduous in offering their services in explaining the Act, and in smoothing the way for its introduction. First we met the Chambers of Commerce and local authorities, next we have met the occupiers of workshops collectively, or visited them individually to aid and advise them."

But there was a general unwillingness on the part of the local authorities to undertake work of so novel a character. The members of the town council "did not care for making themselves obnoxious by interfering with their fellow townsmen. If they did so it would probably be remembered against them at the next election of town councillors, and it would end in their rejection."

Mr. Baker quoted one case in which a manufacturer, who was a member of a local governing body, told him that they had given all their officials notice that if any of them gave information about the workshops in the district they would be instantly dismissed.³

In some of the largest towns, in particular in Liverpool, Birmingham, Bristol, Stockport, and Chester, no steps were taken to put the Act into operation even after the fullest discussion and the offer of assistance from the factory inspectors.⁴

In some places, such as Sheffield, Paisley and Chichester, the local sanitary authority absolutely refused to administer the Act. In the majority of places it was simply ignored. Either no action was taken, or the inspection of workshops was formally delegated by the town council to the sanitary or watch committee, and

¹ Report of Inspector of Factories, H. C., 1870, Vol. XV., p. 126.

Ibid., 1869, Vol. XIV., p. 465.
 Ibid., 1868—9, Vol. XIV., p. 565.
 Ibid., 1871, XIV., p. 87.

there the matter dropped. In the few places where inspectors were appointed it was usually either without salaries, or with salaries so inadequate that it was impossible for them to devote the time to the duties which the Act required.

Leicester, 1 Nottingham, Leek, and Stafford were laudable exceptions to the general neglect,2 and are particularly interesting as showing what might have been done had every local authority performed its duty so well. In Leicester the town council at once instructed three or four men to obtain the information necessary for enforcing the Act, and the work of inspection was afterwards carried on by the inspectors of nuisances. In Nottingham the town council appointed a detective police inspector to see that the Act was observed, and this was attended with good results. But the most striking example of the success which might attend local administration was afforded by Leek. There the Police Commissioners appointed Mr. Farrow as inspector of workshops. He appears to have performed his duties in a remarkably efficient manner, and he submitted a monthly report to Mr. Baker, the factory inspector for the district, in which, amongst other matters, he accounted for the attendance at school of all children employed in workshops.³ So good were the results that the Commissioners continued to employ Mr. Farrow as inspector of workshops until 1876, five years after the administration had been handed over to the factory department.

The unequal administration of the law in workshops, as compared with that in factories, resulted in growing

¹ The Local Board of Leicester had originated enquiries into the sanitary condition of workshops as early as 1864, but this example had not been followed by any other local authorities. See second "Report of Children's Employment Commissioners," 1864, XXII., p. xxxvii.

2 See Report of Commissioners, H. C., 1876, Vol. XXIX., p.

³ See Report of Factory Inspectors, H. C., 1871, Vol. XIV., p. 109.

dissatisfaction. When it is remembered that the distinction drawn between a factory and a workshop was the arbitrary one depending upon the number of persons employed, and not upon any difference in the character of the industry, it is easy to understand the anomalies which existed, and the advantages which would be enjoyed by the small master over his competitor who happened to employ more than fifty persons, and who therefore had to conform to the law.

After a trial of four years it was recognised that the attempt to make use of the existing local sanitary authorities for the inspection of workshops had failed, and that something must be done to diminish the discrepancies which existed between factories and workshops. Various recommendations were made by inspectors and others.

Mr. Baker suggested that local authorities should appoint sub-inspectors of workshops to act under the direction of the factory inspectors, and, with a view to making them independent, he recommended that the power to dismiss them from office should rest with the Secretary of State.¹ It was finally decided to hand over the administration of the Workshops Regulation Act to the factory inspectors. In the words of the Factory Act of 1871, "it shall cease to be the duty of the local authorities to enforce the provisions of the Workshops Acts, 1867 to 1871, and it shall be the duty of the inspectors and sub-inspectors of factories to enforce the provisions of these Acts." This transfer of power from the local authorities to the Home Office increased the number of places under the control of the factory inspectors from 30,000 in 1867 to 110,000 in 1871. Thus a great deal of additional work was thrown upon the factory inspectors, for not only was the actual number of places under inspection about four times as great as it had been before, but

¹ See Report of Inspector of Factories, H. C., 1871, XIV. p. 188.

many of the workshops were situated in out-of-the-way districts, and owing to the smallness of their size it was impossible for the factory inspectors, who then merely paid occasional visits from London, to make themselves acquainted with the workshops in these out-of-the-way places.

A reorganisation of the factory department became necessary, and the difficulty was partly met by creating a new class of junior sub-inspectors. But the work thrown upon the factory inspectors was even then more than they could efficiently perform, and the result was that the periodical inspection of factories was neglected—in order to make time for the inspection of workshops. The inspectors complained that they found less regularity in nearly every factory they visited, and they found it "impossible to discover all the workshops in large towns or scattered workshops in country districts. Moreover. when one visit has been paid, and the law explained, some years must elapse before the workshop can come in rotation to be re-visited."1

Although the administration of the Workshops Regulation Act had been transferred to the factory department. it must be noticed that until 1878 the factory inspectors had no direct authority to enforce sanitary regulations in workshops. Their power with regard to sanitation was limited to that of enquiry and advice. The sanitary condition of workshops was still regulated by the Sanitary Acts, 1866 and 1875, which were administered by the local sanitary authorities. The Public Health Act of 1875 had the curious result of exempting a large number of workshops from any sanitary regulations whatever. Under the Sanitary Act of 1866 the word "nuisance" included "any factory, workshop, or workplace not already under the operation of any general Act for the regulation of factories or bakehouses, and not kept in a cleanly

¹ Report of Inspectors of Factories, H. C., 1873, XIX., p. 139.

state." This definition was repeated in the Public Health Act of 1875, and as the Commissioners of 1876 pointed out, "the word 'already' in the above definition, on its transference from the Sanitary Act of 1866 to the Consolidated Act of 1875, seems to have caused a dropping by the way, out of the provisions in question, of all workshops which in 1866 were not, but in 1875 were already under the operation of a general Act for the regulation of factories and bakehouses."2 Thus from 1875 to 1878 all those workshops to which factory legislation had for the first time been extended in 1867, were entirely unregulated with regard to their sanitary condition.

The factory inspectors had, however, the power of enquiry into such matters, and evidence is given that they exercised this power to a considerable extent, and did their utmost to induce employers to adopt their suggestions

for improving the sanitary condition of workshops.

The factory inspectors were not long in discovering those defects in the Workshops Regulation Act, which made its enforcement such a difficult matter; and they reported on the need of a greater uniformity in the regulations for workshops and factories, if the inspection of workshops was to be rendered more effectual. The mere fact that there might be two establishments in the same trade, distinguishable only by the number of persons employed, yet subject to totally different regulations, was enough in itself to complicate greatly the work of inspection, and to increase the difficulties of the officials who had to enforce the two systems.

The Commissioners of 1876 went fully into the matter, and agreed with the inspectors in recommending the assimilation of the law relating to workshops with that in force in factories. They pointed out that "the mere economy of energy which would result from having but

 ^{33 &}amp; 34 Vict. c. 104, sec. 3.
 Report of Commissioners, H. C., 1876, Vol. XXIX., p. lxxiii.

one system to administer instead of 'two,'" was "expected by some of the inspectors to compensate greatly, if not completely, for any insufficiency in the staff to cope with the work laid upon it."1

The evidence given before the Commission showed the absurdity of supposing that the laxer regulations for workshops could ever be satisfactorily enforced, for not only did the occupiers of workshops derive safety from their numbers and obscurity, but, whilst quite as slow as the old factory occupiers to accept the interference of Government in their concerns, the workshop employers were even more slowly convinced of the reason and benefits of regulation; thus evasions were shown to be more frequent, detections more difficult, and hence the need of greater stringency in the regulations.2

But while the Commissioners of the "'sixties" had been so strongly impressed with the bad conditions observed in many home workshops, and the tyranny exercised by ignorant and brutal parents, that they were ready to advocate the extension of full factory law to homes, the Commissioners of 1876, whether more alive to difficulties of administration, or more under the influence of individualistic scruples, were inclined to deprecate any interference therewith. They therefore recommended that the sanitary provisions of Factory Acts should be extended to all places of work, except to dwelling-houses where none but the inmates were employed, which should, they thought, be left under the laxer regulations of the Public Health Act, administered by the local authorities. They further recommended that the enforcement of the sanitary provisions of the Factory Acts should be expressly made the duty of the inspector of factories in all places to which their powers extended.3

These recommendations were practically embodied in

¹ Ibid., p. xvi.

² *Ibid.*, p. xvii. ³ *Ibid.*, p. lxxvii.

the Consolidating Act of 1878. By this Act the definitions of "factory" and "workshop" were altered in such a way that the distinction between the two was made to turn, not, as hitherto, on the numbers employed, but upon the use of motive power, and the important change was made of bringing all "ordinary" workshops—that is, workshops in which children or young persons are employed—under precisely the same regulations as non-textile factories as regards hours of work, sanitary and other conditions of employment; but no notice of occupation was required to be sent in, in the case of workshops, and the extraordinarily retrograde step was taken of exempting women's workshops (i.e., workshops in which women, but no children or young persons are employed) and domestic workshops from the regulations relating to sanitation, simultaneous mealtimes, holidays, the affixing of notices and abstracts, and the notification of accidents. Also the regulations as to the hours of women in women's workshops. and of young persons in domestic workshops, though they limited the period of employment to ten and a half hours a day, were rendered practically nugatory owing to the fact that the legal employment might be taken any time between 6 a.m. and 9 p.m., whilst in domestic workshops the hours of women were entirely unregulated.

The factory inspectors were charged with the duty of enforcing all the provisions of the Act of 1878, and for this purpose they were given the power of entering by day or night any factory or workshop in which they had reasonable cause to believe that persons were employed, with the exception of places used as dwellings as well as factories or workshops, in which case an inspector, before he could enter, had to obtain written authority to do so from the Secretary of State or a Justice of the Peace.

The result of the exemptions granted by the Act of 1878 to particular classes of workshops was a curiously anomalous state of things with regard to the

division of duties between the factory inspectors and the inspectors of the local sanitary authority. From what has been said, it will be seen that women's workshops and domestic workshops were, as regards their sanitary condition, still under the somewhat indefinite regulations of the Public Health Act of 1875, which were, of course, administered by the local authorities. The result was that in these two classes of workshops, practically all that the factory inspector could attempt to do was to enforce the regulations as to hours for protected persons. In domestic workshops in which no young persons or children were employed the factory inspector had no control whatever. It will be realised how difficult was any effective administration under such a system of inspection. One or two imaginary instances will serve to illustrate this. Suppose a case in which twenty men and women were employed, with one girl or boy under the age of eighteen years. Such a place would be an ordinary workshop under the entire supervision of the factory inspectors. Six months hence the factory inspector might again visit the workshop, and find that the boy or girl had been removed, and that he therefore had no power to insist on the observance of sanitary conditions. The place would then be a woman's workshop, and as such its sanitary condition would be regulated by the Public Health Act, administered by the local authority.

Again, the dividing line between domestic and non-domestic workshops was equally fluctuating. Imagine a family working at home, and some one from outside, say a boy or girl of seventeen, is brought in to assist. Such a place would then, technically speaking, cease to be "domestic," and would therefore fall under the administration of the factory inspectors.

Under such a system of divided authority, coupled with

¹ See Lakeman's evidence given before the Select Committee of the House of Lords on the Sweating System, Parliamentary Papers, 1888, Vol. XXI., p. 436 (Q. 16,476).

the fact that in certain classes of workshops no notice of occupation was required, it is scarcely surprising that thousands of workshops escaped inspection altogether, sometimes owing not so much to unwillingness on the part of the local authorities, as simply to ignorance as to what workshops really came under their control. Manchester is a case in point. Considerable interest amongst members of the City Council was aroused by a special report which appeared in the Lancet on "Sweating amongst Tailors at Liverpool and Manchester," in which it was shown that the evils of sweating were not confined to the metropolis, but were extensively practised at Manchester, Liverpool, Leeds, Bristol, and other important towns. The writer of the article urged the necessity, on grounds of public health, of enforcing sanitary regulations, even in workshops in which there was no limitation of hours. "It is high time," he said, "that the attention of the authorities and the public should be awakened, and the investigation extended." In the absence of the chairman of the nuisance committee, the Lord Mayor of Manchester at once caused an inspection of workshops to be made in order to ascertain how much truth there was in the statement made in the Lancet report as to the conditions prevailing in the tailoring shops. The inspectors reported to the improvement committee that in the district they had visited they found 120 workshops, of which fifty-six were registered under the Factory and Workshops Act, 1878, and, so far as could be ascertained, the remaining seventy-three, or at all events a large proportion of them, ought also to have been registered. From the discussion which ensued it is evident that a great deal of confusion existed in the minds of the members of the City Council as to who was responsible for the sanitary condition of workshops. In the words of the Mayor: "There was evidently a missing link in this business, and it was this, that nobody seemed to know where the duty of the sanitary inspector ceases, and that of the factory

¹ See Lancet, April 14th and 21st, 1888.

inspector begins, in connection with premises which gradually and unconsciously become transformed from dwelling-houses into workshops."1

In Birmingham, also, the attention of the City Council was aroused by the Lancet report to consider the question of workshop inspection. But, though there was a considerable amount of co-operation between the officers of the health committee and the factory inspectors, great difficulty was experienced in discovering the whereabouts of the small workshops, dwelling-rooms, and garrets in which work was carried on.2 The evidence given before the Select Committee of the House of Lords on the sweating system made it abundantly evident that insanitary conditions, long hours of work, and starvation wages-in fact, all the characteristics of what is known as the sweating system—were to be found in their most aggravated form in precisely those classes of workshops to which special exemptions had been granted in 1878. For this reason most of the witnesses who gave evidence before the Select Committee urged the necessity of placing women's workshops upon the same level as other workshops as regards their sanitary condition, and the requirement as to notices, abstracts and other matters; and some witnesses went a step further, and advocated the extension of Factory Act regulations to domestic workshops.3

From the evidence given by factory inspectors and others before the Select Committee, it was clear that one of the great difficulties which had attended any attempt on the part of either the local authorities or the factory inspectors to enforce the law in domestic and other small workshops was the impossibility of ascertaining the

See Manchester City News, May 5th, 1888.
 See evidence given before Select Committee of the House of Lords on the Sweating System, 1889, Vol. XIV., by Alderman Cook, M.P., Chairman of the Health Committee of the Birmingham City Council (Q. 27,547—27,601), and by Mr. Knyvett, the District Factory Inspector (Q. 27,602—27,645).

³ See H. L., 1889, XIII., Q. 17,967, 18,307, 18,623, &c.

whereabouts of places in which work was carried on.1 It was pointed out that occupiers of workshops were not required to send any notice of occupation, and that it was therefore "matter of chance" whether or not the inspectors discovered the "sweaters' shops" which were continually springing up in back streets, where people worked in their own homes.

It was therefore recommended by inspectors and other men of experience who gave evidence before the Select Committee, that all workshops should be registered,2 and, partly with a view to facilitating the discovery of workshops whose occupiers failed to send notice of occupation, it was recommended by Mr. Redgrave, Oram and others that lists of out-workers should be kept by employers and contractors who were in the habit of giving out work to be done.3

These recommendations were to some extent carried out in 1891. In that year no less than three Factory Bills were introduced, and Mr. Matthews, the Home Secretary, in moving the second reading of the one which finally became law, said that the "design and object" of the Bill was "to bring all workshops and all factories up to the same sanitary level."4

By the Factory Act of 1891 the special exemptions hitherto enjoyed by women's workshops were repealed, and the sanitary regulations were extended to workshops in which only adult men are employed; but the regulations as to domestic workshops remained unaltered, except that inspectors were given the right to enter such workshops without the writ or warrant which had hitherto been required.

¹ See Report of Select Committee of House of Lords on the Sweating System, 1889, XIV., Q. 27,598 and 28,403.

3 See evidence given by Redgrave and Oram, ibid., Q. 32,467 and

32,332.

² There was some difference of opinion as to whether this recommendation should apply to domestic workshops in which only adults were employed. See Oram's evidence, 1889, XIV., Q. 32,328—32,332. See also Redgrave's evidence, 32,416.

Hansard, February 26th, 1891.

An important change was made with regard to the administration of the law. It was decided again to try the experiment of making use of the existing local sanitary authorities, by transferring to them the supervision of the sanitary condition of workshops. The reason for this change, as explained by the Home Secretary, was that now that they were "extending the sanitary provisions of the Factory Act to all workshops throughout the country, of whatever kind they may be, so that every cobbler's shop, every blacksmith's shop, every tailor's shop in towns and in the country will come under the provisions of the sanitary law, it seemed foolish not to take advantage of the existing machinery provided by the local authorities."

At the same time, a certain "dictatorial" power was reserved to the factory inspectors to act in default of the local authorities.2

The transfer of powers was brought about by exempting workshops from those provisions of the Factory Act of 1878, which related to cleanliness, ventilation, overcrowding, and limewashing; and the sanitary condition of workshops was henceforward to be regulated by the Public Health Acts, supplemented by sec. 4 of the Factory Act of 1891, which made further regulations with regard to limewashing and freedom from effluvia. For the purpose of exercising their duties with respect to workshops, the sanitary authorities and their officers were given "all such powers of entry, inspection, taking legal proceedings or otherwise, as an inspector under the principal Act."

The Act of 1891 required that notices of occupation of workshops (including men's workshops) should be sent to the factory inspector, and the latter were required to forward to the local authorities all such notices received by them. The medical officers of health were required to notify to the factory inspectors the existence of any

Hansard, February 26th, 1891, p. 1,715.
 See 54 & 55 Vict. c. 75, sec. 2, and 58 & 59 Vict. c. 37, sec. 3.

workshop in which they became aware that "protected persons" were being employed. By this means it was intended to throw upon local authorities the responsibility of bringing to light unnotified workshops, for it was felt that the sanitary inspectors, in their rounds of house-to-house inspection, were the people most likely to discover the existence of such workshops.

The recommendations given before the Select Committee on the Sweating System, with regard to lists of out-workers, found a place in the Act of 1891, which required that such lists should be kept by occupiers and contractors in any trades or industries to which the requirement might be extended by order of the Home Secretary, and be open to inspection by the factory inspectors and local authorities, and in 1895 the further step was taken of requiring the lists to be sent to the factory inspectors twice a year. Inadequate as these regulations have proved, we can hardly exaggerate their importance, from the point of view of administration, quite apart from that of public health, for, if strictly enforced, the result of extending them to all industries in which work is given out, would be that information would be available of the whereabouts of every place in which industrial work is being carried on; and such information is the first step towards securing the enforcement of minimum conditions of employment over the whole of the industrial world.

We now come to consider the way in which this system of dual control has worked out in practice.

In the reports of the factory inspectors from 1891 onwards, the fact is brought out that while great improvements have taken place in some of the large towns, where the municipal authorities are alive to their responsibilities, yet in the small towns and rural districts practically nothing is done. The members of the town councils are reluctant to make themselves obnoxious by interfering with their fellow townsmen, and by raising rates for the payment of additional officials, and the number of sanitary

inspectors is seldom sufficiently large to allow of a systematic inspection of workshops where no special inspector has been appointed for the purpose.

The Factory Act of 1895, which made it compulsory for local authorities to report to the factory inspector the proceedings taken with regard to complaints received from him, marks a great advance in the activity of sanitary authorities. Before 1895 the reports of the medical officers of health show that, with few exceptions, they do not seem to have considered it their duty to take any initiative with regard to the inspection of workshops, and at the most attended only to complaints.

Since 1895 the responsibility of the local authorities has been more widely recognised, and in some of the larger towns, notably in Liverpool, Manchester, Nottingham, Leeds, Bradford, and several of the borough councils of London, special inspectors of workshops have been appointed. Their appointment has invariably been attended with success, and in such places evidence has been given of the effective administration of the law in workshops which might have resulted from local control, had some sort of compulsion been brought to bear upon the local authorities to undertake the duties laid upon them by the Factory Acts of 1891 and 1895.

But, with these few exceptions, it is no exaggeration to say that the local authorities have failed to recognise their responsibility in the matter, for where no special inspectors are appointed, no register of workshops is kept, no systematic inspection is carried on, and practically the only workshops visited are those of which complaints have been received from the factory inspector. Now, i districts in which the local authority inspects merely upon complaint, the object of the Legislature has been

F.L.

¹ The districts which afford the best example of effective local administration are Kensington, Islington, St. Pancras, Hackney and Marylebone. In all these districts women inspectors have been appointed. See "The Inspection of Women's Workshops in London," Economic Review, January, 1901.

entirely defeated, for the sanitary inspectors do nothing to aid the factory inspectors in the discovery of unnotified workshops, and it is precisely those workshops in which insanitary conditions are most likely to exist that escape inspection altogether, for they remain undiscovered either by the factory or the sanitary inspector.

It is on these grounds that some people, in their laudable anxiety to see an effective administration of the Factory and Workshops Acts, entirely condemn the present system of dual control, and advocate the placing of all factories and workshops wholly under the factory department. But the question before us is not, what is the most ideally perfect system of control that might be devised for a new society, but how—given the existing machinery—to make it possible to bring every workplace, and dwelling-room in which work is carried on, under legislative control and inspection. The only way in which this is possible is to make use of the officers of the local sanitary authorities, who in the poorer districts of large towns generally make house-to-house inspections for sanitary purposes, and are therefore better equipped than anyone else to discover the numerous out-of-the-way places in which work is carried on in the homes of the workers.

The Act of 1901 has been condemned for giving increased powers to local authorities, instead of handing over the administration of the law in workshops to the factory department. Mr. Ritchie, speaking before the Grand Committee on Trade in the House of Commons, on the machinery for the inspection of out-workers, said "it was clear that without an enormous addition to the staff the factory inspectors could not undertake the work, especially when it was remembered that in some localities the homes of workers were to be counted not by tens but by hundreds, and even thousands. The local authority was responsible for the administration of the sanitary laws and had the machinery for the purpose. The argument that some local authorities would be indifferent

was not sufficient to take away from them duties they were willing to perform and which would rest upon them. He would not be responsible for asking the House of Commons to enact clauses which would be ineffective or inoperative, and these provisions would be so if the local authorities were struck out. It would be impossible to obtain from the Treasury the money to provide an efficient staff of inspectors."

The cause for the partial failure of dual control, up to the present time, is to be found, not in any inherent weakness in the system itself, but in the imperfections of the law, the chief of which have been (i.) the insufficient powers given to local authorities; (ii.) the overlapping of functions between factory and sanitary inspectors; and (iii.) the lack of any adequate central control by which compulsion might be brought to bear upon defaulting local authorities.

Much excuse for the neglect of local authorities to undertake their duties with regard to the inspection of workshops is to be found in the insufficient powers given to them. Hitherto they have been hampered for want of information as to the existence of places in which work is carried on in the homes of the workers. A large proportion of these are "out-workers," and by reason of the fact that the work is often carried on "at irregular intervals, and does not form the whole or principal means of living to the family," such places would not come within the scope of the Factory Acts, were it not for the regulations referring to out-workers, and in any case their sanitary condition is regulated by the Public Health Acts only. inspection of out-workers is therefore chiefly a matter for the local sanitary authority, but hitherto the lists of out-workers have been sent to the factory inspectors only, who were not required to forward them to the local authorities. Thus the sanitary inspectors, though responsible for the enforcement of the sanitary conditions in such places, have had no means of ascertaining the whereabouts of the out-workers who reside in their districts; and the only way in which they could discover out-workers, except by house-to-house visitation, was to make copies twice a year of the lists of out-workers at the factories and workshops in the districta proceeding which was not provided for in the Factory Acts, and would obviously occupy a large amount of time. Moreover, in London, these lists were practically useless, owing to the fact that more often than not the out-workers live in a different district from the one in which their employers' factory or workshop is situated, and the Act of 1891 and 1895 did not provide for any interchange of lists of out-workers.

An example of the difficulties encountered by those local authorities who endeavoured to carry on an effective inspection of workshops and workplaces is given by Islington, where two inspectors of workshops were appointed in 1896. Islington is remarkable for the number of out-workers who live in that parish but work for City and other firms. The vestry of Islington was one of the first to take up the inspection of out-workers, and the Medical Officer of Health adopted the plan of voluntarily sending on to other local authorities the names and addresses of out-workers who, though taking out work from Islington firms, lived in other districts. But as, with a few exceptions, similar lists were not received from other vestries, the inspectors of workshops in Islington had great difficulty in ascertaining the names and addresses of the out-workers who lived in their district, and any efficient system of inspection was almost impossible.

Bearing in mind the difficulties hitherto encountered by Islington, Hackney and the few other local authorities who have to some extent taken up the inspection of outworkers, the importance of the change made in the Act of 1901, which requires that lists of out-workers should be sent to the district councils as well as to the factory

inspectors, and which provides for the interchange of such lists between local authorities, will be fully appreciated. Now that some of the difficulties have been removed, there will be less excuse for defaulting bodies. The Act of 1901 has been condemned for giving further powers to local authorities, but this is precisely what was required. In answer to objections which were raised by Sir Charles Dilke in the House of Commons, on the ground that powers were being taken away from the factory inspectors and handed over to local authorities, Mr. Ritchie explained that "the existing law does not provide for any inspection of out-workers worth anything," and that the aim of the Bill was "to amend the law so as to make inspection effectual."1

With regard to the division of functions between factory inspectors and sanitary inspectors, the new Act makes little change. Some amount of confusion is the inevitable consequence of a divided authority, and the result is not so much that friction is caused by two sets of officials doing the same work twice over, as that the work gets neglected owing to the fact that both sets being partially responsible, neither makes itself entirely so; that is to say -in the words of a phrase which deserves to become classical—the danger is "not overlapping, but hiatus."2

For example, there is no doubt that the Factory Act requirement of 400 cubic feet of space for each worker employed overtime is practically a dead letter in the smaller workshops. It is a disputed point who is really responsible for its enforcement. The local authorities are primarily responsible for the enforcement of the provisions against overcrowding, but no local authority has yet undertaken to inspect workshops at a time when overtime would be worked. As a matter of fact, the factory

¹ The Times, June 29th, 1901. ² See Sir Edward Grey's speech in the debate on the Education Bill, The Times, May 7th, 1902.

inspectors are able, when evasions are detected, to enforce the requirement as a condition of overtime employment, but owing to the length of the working day, inspectors find great difficulty in detecting overtime employment in women's workshops. Another disputed point is the regulation of temperature. The provision of the Act of 1895, which requires that a reasonable temperature must be maintained in the workrooms, is not included in the regulations for which the local authorities are made primarily responsible, and so, though a sanitary provision, it appears to be a matter which should be left to the factory inspectors. But some medical officers of health maintain that the enforcement of a reasonable temperature is among the duties of the sanitary inspectors; in which case they have to take action under the Public Health Act, and prove that the workroom in question is "in such a state as to be a nuisance, or dangerous or injurious to health."

The enforcement of the obligation to supply a sufficient number of sanitary conveniences is in the hands of the sanitary authority in all places where the borough or district council has adopted sec. 22 of the Public Health Acts Amendment Act, 1890, but elsewhere it is the duty of the factory inspector to see that there are sufficient and suitable sanitary conveniences. In London the factory and sanitary inspectors have hitherto had concurrent powers in the matter, but by the Act of 1901 the responsibility is definitely thrown upon the sanitary authorities.¹

By the Act of 1901 a step forward has been taken in the direction of bringing compulsion to bear upon local authorities to undertake the inspection of workshops. It requires that the medical officers of health shall keep registers of the workshops in their district, and shall in their annual report to the district council make special mention of the work done by them during the past year under the Factory and Workshops Acts, and copies of such reports are to be forwarded to the Secretary of State. By this means some amount of publicity will be provided for, and it will enable a comparison to be made between the number of workshops on the register, and the number under inspection. Whether under the new Act sufficient pressure will be brought to bear upon local authorities remains to be seen. From the experience of their inertness in the past, it would appear that nothing short of an actual compulsion to appoint special inspectors of workshops would suffice. The appointment of an adequate number might be encouraged by the indirect, but very effective method of grants in aid—the central authority contributing towards the salaries of inspectors of workshops, with power to withhold the grant in cases where the local authorities do not come up to the required standard of efficiency.

The work of the factory inspectors during the last twenty years has gone on increasing in extent and efficiency. In 1878 bakehouses were for the first time included under the term non-textile factories and workshops, and as such were placed under the control of the factory inspectors department from 1878 until 1883, when the local authorities were made responsible for the sanitary condition of retail bakehouses. Since 1895 laundries have been under inspection either as factories or workshops according to whether motive power is used or not. The work of the factory inspectors has also been considerably increased by legislation which has extended their jurisdiction beyond the administration of the ordinary regulations of the Factory and Workshops Act.

Under the Truck Act, 1887, the enforcement of the

¹ Bakehouses were first brought under regulation in 1863, by an Act (26 & 27 Vict. c. 40) which prohibited the work of young persons at night (*i.e.*, from 9 p.m. till 5 a.m.) and made certain regulations for securing sanitation and cleanliness. The administration of this Act was left to the local sanitary authorities, and as bakehouses were not included in the Factory and Workshops Acts of 1867, the factory inspectors had no right of entry into bakehouses until 1878.

provision against the practice of truck in factories and workshops was handed over to the Home Office. The administration of the Cotton Cloth Factories Act, 1889, rests with the inspectors of factories. Under the Protection of Children Act, 1894, which, under special circumstances, empowers magistrates in petty sessions to license the employment of children between the age of eight and ten in public entertainments, the inspectors of factories are authorised to interfere if the conditions under which a licence is granted are not observed.

But in spite of this increase in their duties the work of the factory inspectors has been considerably simplified by the introduction into the Factory Acts of 1878—1901 of regulations whereby the detection of evasions is attended with less difficulty than was formerly the case. Amongst such regulations are the requirement that occupiers shall notify to the district inspector their intention to work overtime, not later than 8 p.m. on the day on which the overtime is to be worked, and the requirement that no work shall be taken home to be done, except during the legal hours of employment in the factory or workshop.2

Again, the regulation whereby occupiers of factories must keep a list of all the accidents which have occurred in the factory3 has done much to make administration effective. Numerous other instances of the same kind might be quoted, but these will suffice as illustrations.

During the last ten years the staff of factory inspectors has been increased, and two new departures have been made. In 1893, in accordance with a request contained in a memorial of trade unionists, it was decided to appoint a certain number of working men as "assistants" to the inspectors of factories, whose special duty it should be to assist in administering the law in workshops. is somewhat doubtful whether this new departure has been attended with the success which was anticipated by

^{3 58 &}amp; 59 Vict. c. 37, s. 20.

¹ 41 Vict. c. 16, s. 66. ² 58 & 59 Vict. c. 37, s. 16.

its advocates. It is evident that the work of inspection requires many qualities which are to be found only in educated men, endowed with a considerable amount of tact; and this, perhaps, is even more necessary in dealing with the small employers in workshops, than with large employers who are more familiar with the requirements of the Factory Acts. In the same year (1893), a trial was made of appointing two women inspectors, "to make special inquiries in the principal towns, acting as peripatetics, and not being attached to any fixed districts ... to be always ready to receive and attend to any complaints received from, or relating to, the employment of women in any part of the United Kingdom." The number of women inspectors have now been increased to eight. Their appointment has been attended with undoubted success, and they deserve much credit for the zeal they have shown in securing an effective administration of the Factory Acts.

We have said enough to show that within the last thirty-five years, although in theory there has been some retrogression, as in the special exemptions granted to certain classes of workshops in 1878, there has at the same time been a considerable advance in administrative efficiency. The recognition of the necessity of making Factory Acts so definite as to render evasions difficult has been embodied in the stringent regulations enforced in textile factories, but there are hundreds of trades to which special exemptions are granted, and the majority of workshops may be said to be in very much the same position that cotton factories were in the early part of the nineteenth century, when the law, from its indefiniteness and the absence of specific requirements, remained almost a dead letter.

It is perhaps hopeless to expect that the regulations for home-workers will ever be brought up to the level of Factory Act requirements, but it is imperative to ensure that all workshops shall be subject to inspection and control. It is useless to expect occupiers of small workshops,

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who are mostly ignorant of the law, to send in notices of occupation, and perhaps the best plan which has been suggested for bringing them under inspection is the compulsory registration of all places in which work of any sort is carried on, and the enforcement of a penalty for carrying on work in any place not so registered and licensed. Until this is done, the tendency of factory legislation in unskilled trades must be, to some extent, to drive work into the homes.2 That such a tendency is sometimes perceptible, is one of the most formidable arguments wielded by the opponents of State interference. It is, however, an argument not for relaxing control over workshops, but for strengthening it and extending its area, so that no workroom, however small, should be outside its scope. Difficult as it would be to enforce regulations in such places, enough has been said to show that in some few instances there has been carried on, for some years by the local authorities, as efficient an inspection of workshops and out-workers as the law would allow. This is sufficient proof that if pressure were brought to bear by the central authority on defaulting bodies, these difficulties would no longer be insuperable.

¹ See, e.g., Bill for Regulation of Home Work drawn up by the Women's Industrial Council and the Scottish Council for Women's Trades. This Bill, however, would place all workplaces under the control of the factory inspectors only. In a Factory and Workshops Act Amendment Bill, introduced by Mr. Sydney Buxton, in 1891, it was proposed that a register should be kept by occupiers, of all persons to whom work was given out, and that such registers should be open to inspection not only by the officers of the sanitary authority, but also by the secretary of any trade society (61 of 1891, sec. 39. See Parliamentary Papers, 1890—1, Vol. IV., p. 171). Trade unionists themselves are anxious to obtain this power, because they consider that the sweating of unknown and unorganised workers can best be checked by the publicity which would thus be afforded.
² This tendency is only to be found in unskilled trades. In skilled

² This tendency is only to be found in *unskilled* trades. In skilled trades employers find that it pays better to have the work done on the premises by regular workers. In those trades where lists of outworkers are required to be kept, the tendency of factory legislation (as stated by several large employers in Bristol and Gloucester to the present writer), has been to prevent the giving out of work owing to

the "inconvenience" of keeping the lists.—(A. H.)

CONCLUSION.

A RECENT writer has shown that when once the idea of the legal protection of labour has been grasped and applied to certain specific industries, the inner logic of things leads irresistibly to its further extension and development. The benefit to the operative becomes evident, no injury is done to trade, and it is felt to be unjust that what is binding on one industry should not, given similar relations, be binding on all.1 The progress of legislation thus tends continually in the direction of a more complete comprehension of the industries and persons affected, greater definiteness and particularity in the specific regulations laid down, increased co-ordination of parts in the organisation of administration. Beginning with a tentative and imperfect measure of control intended only for the benefit of poor-law apprentices for whom the State was already in a measure responsible, the Government has seen itself compelled by this modest precedent to take first children, then young persons, then women under its protection, and to extend the operation of the Acts to one industry after another till nearly the whole field of manufacture has been covered. The regulation of hours, from being lax and indefinite, has become more and more stringent and particular, and the provisions for health and safety, which started with a mere injunction of elementary cleanliness, have developed into a precise code of special means of prevention of the dangers and insanitary conditions incidental to certain industrial employments. The administrative organ, from being selected merely by the accident of worldly position and local proximity, with neither guarantee of fitness nor

¹ Nostitz, "Das Aufsteigen des Arbeiterstandes in England," p. 406.

remuneration for the work, has gradually evolved into a body of professional experts, qualified and graded for this special duty. All this has been accomplished within the limits of a hundred years, at first chiefly as a measure of protection by the governing classes, impelled by the agitation of working men, in later times partly by the pressure brought to bear by trades unions, partly through the increased interest taken in questions of public health, and the growing sense of solidarity in the community as a whole. But it must not be forgotten that in a society organised as ours is, the possibility of further social reform at any given time is strictly limited, first by the amount of sympathy and interest that public opinion can be persuaded to give, secondly by the degree in which that sympathy and interest is educated and intelligent enough to know what it wants. And here the authors are acutely conscious that they leave off with a note of interrogation. What prospect is there that the principle of collective control will be further strengthened and extended in the improvement of the conditions of industrial life and the social and industrial efficiency of workers? The passionate controversies of 1844 were followed by a period of full acquiescence and sanguine confidence, in which the principle of State control over industry was unhesitatingly accepted; that again by a time of doubt and hesitation, of opposition on new lines, and the partial retrogression of 1878. The last twenty-four years are difficult to summarise, partly because we are too near to see things in their true proportion, partly because of the vacillation and uncertainty of public opinion. Report of the Lords' Committee on Sweating told us over again what we had learnt in 1867 and forgotten in 1878, that the worst conditions, the longest hours, and the lowest wages existed in the domestic workshops which we had been so concerned to leave "free." Since a marked improvement 1801 there has been administrative efficiency, and indications of a new constructive policy can be discerned in the clauses of the Acts of 1891 and 1895 that relate to out-workers, and to the provisions for health and sanitation in workshops. A few years ago, indeed, it might have seemed that we stood on the threshold of a period of peaceful reform and scientific remedial legislation, in which the tentative and imperfect measures of the present code might be worked up into an effective scheme that should embrace the whole of industry. But a good many things have been put into the melting-pot since then, and it would now be rash to prophesy what the next step will be. It may be that the realisation of the responsibilities and needs of Empire will force home the practical urgency of those social reforms without which an "imperial race" can never be reared; it may be, on the other hand, that the more immediate and pressing needs of the moment may make it impossible to give adequate attention to those remoter but equally imperative considerations. It is perhaps well to take stock of the situation and ask ourselves where we stand. We cannot adopt the enthusiastic tone of some who have written of the English Factory Acts as if the conditions of labour had thereby been completely transformed and humanised. On the contrary, closer study reveals the fact that an extraordinary timidity has beset all our efforts in the matter. In the beginning the proposal to restrict children to a working day about 30 per cent. longer than strong men now think good for themselves was treated almost hysterically, and the ruin of trade and commercial collapse of the country were freely prophesied as the necessary result. Inquiry after inquiry, commission after commission, have demonstrated the groundlessness of these rather unmanly terrors, yet the Factory Code is still the barest minimum, and scarcely ever is there a discussion in Parliament on the subject that does not reveal that the masses of information and material that exist for the full economic justification of further measures are practically unknown to all but

a select few of our legislators. The same stale arguments recur that have been used and disproved a hundred times, and though no one has the courage—probably no one exactly wishes—to move a comprehensive repeal, the whole questions of State interference and the right of women to be sweated are apt to be raised over some trifling detail of laundry hours or seats for shop assistants. The crying evils of child-labour, the exhausting strain on women, the insanitary conditions of most trades and the deadly perils of a few, have been patiently studied again and again, but the results have often lain forgotten for years or decades before some meagre attempt at a remedy could be found or sanctioned. The conditions of homework, for instance, were thoroughly explored in the "'sixties," and the Commissioners were driven to the inevitable conclusion that, to be effective, factory reform must be supplemented by the reform of home-work. Granted that it might be impossible all at once to demand from home-workers the same standard as to hours, sanitation, holidays, and so on, that is required in factories, there is a practical consensus of expert opinion that the first step in the regulation of the home should be the compulsory registration of all workplaces, homes included. Yet even this elementary measure of reform has never yet been carried, and it would be idle to pretend that there is much hope of its finding a place on the statute-book in the near future. Laundries and shops are still under a regulation as to hours that is little more than nominal; certain processes, such as book-folding, are implicitly exempt from restriction of hours without any particular reason for the inequality; and there are certain trades, such as fish-curing and fruit-preserving, which have become notorious from the unscrupulous way in which the exemptions granted to them on account of the perishable nature of the material, have been abused. Almost any debate over a Factory Bill will reveal that we have never yet made up our minds what we really mean by

industrial legislation, or what we really want from it. There are excellent people who still argue that burdensome requirements will crush out the small employer and others who cannot for the life of them see why a woman may not work as long as she likes. The answer to these perfectly reasonable objections can only be found by realising at the outset that factory legislation is not intended as a protective measure for any particular individuals or classes.

The first condition of the conversion of public opinion to acquiesce in and approve of measures of collective control is the popularisation of more accurate knowledge. From Dr. Percival and Dr. Ferriar onwards, the inquirer who once gets in touch with the actual facts of industry in a competitively organised community, understands as no one else does, the absolute necessity of a "common rule." It is only as industries are successively taken into consciousness, as it were, and the conditions prevailing in them recognised, that society will consent to move in the matter. Academic scruples can be got rid of only by immediate contact with facts. Mr. Booth's "Life and Labour in East London" has done more to reconcile the public conscience to public control over sweaters' dens than the most brilliant exposition of theory.

If the problems now before us, as for instance the regulation of home-work, or devising a check on the sweating of women's labour, appear insoluble or incapable of being dealt with by the State, we may reflect that the problem of dealing with industry at all in any effective fashion, must have seemed equally hopeless a century ago, with the then existing machinery for administration and investigation. The old organisation of industry had broken down and no wider corporate conscience had yet come into being. But the whole nation has now so far grown together and become consolidated, that even the solitary worker begins to be more genuinely a part of an organic society than he has ever been since the industrial revolution. Society began to feel itself responsible for

the factory children when their condition had been studied and made known, hopeless as it then seemed to find a remedy; when the conditions that govern women's wages and home-work have been more thoroughly explored and exposed, society may be able, not only to acknowledge its own responsibility, but to educate women to realise theirs.2 The present writers desire also to record their conviction. that while inquiry and investigation are much, they are not the only thing needful. Their aim has been to make accessible to the general reader some records of the past and some phases of social progress with which he may be but little acquainted; they hope also to lure students more capable than themselves to researches more complete and thorough than their own can claim to be. But most of all, they cherish the ambition that the facts and details which they have collected may some day be turned to higher uses than they can put them to, may provide fresh material for new ideas and scientific thought, and thus have a part, however small, in the constructive effort of the future.

¹ Harriet Martineau could suggest none better than to "hope that the race in two or three generations might die out." "Autobiography," Vol. III., p. 87.

² See Schmoller, "Grundriss der Volkswirthschaftslehre," pp. 14, 15, especially the quotation from Hartenstein: "Öffentlichkeit ist eigentlich nur ein verschiedener Ausdruck für Gesellung. Der Grad der Öffentlichkeit, der in einer Gesellschaft herrscht, ist so ziemlich der direkte Massstab für den Grad ihrer innern Verbindung."

APPENDIX A.

THE COURSE OF WOMEN'S WAGES DURING THE NINETEENTH CENTURY.

By GEORGE HY. WOOD, F.S.S.

T.

THE history of women as wage-earners under the domestic and factory systems has yet to be written, and little has hitherto been done in tracing the history of their wages. As the effects of factory legislation on the condition of those affected thereby cannot be adequately studied without some knowledge of the changes in women's wages, the purpose of the present chapter is to trace as fully as possible the history of the variations of wages of women workers in certain industries, as shown by changes of average wages in a normal week. Unfortunately, we are limited in the range of industries we can consider, by the deficiency in the material relating to some (e.g., domestic servants), and the unreliability of much that is to be found for others. These limitations necessarily lessen the completeness of our work, and add to the difficulty of the problem we wish to solve. If we wish to know, for instance, how much women's wages have risen or fallen during the past century, we find that it is impossible to give a general answer to such a question, and all we can say is that they have risen, or fallen, in certain industries, by a certain amount per cent. The data for our purpose exist in large variety, and still larger quantity, but when examined they are found to relate to a comparatively small number of employments. Overwhelming in abundance in some of these, especially in the cotton industry, in others the material often consists of two or three isolated statements. Its value is also by no means uniform. On such statistics as those for 1833 in Ure's "Cotton Trade," for 1886 in the Wage Census, and those for 1897 in Miss Collet's Report to the Board of Trade on the Linen and Flax Industry, we may F.L.

place complete reliance, because they are the averages of a large number of returns made from employers' wage-books for the definite purpose of illustrating wages in the period to which they relate. Reliance may also be placed on much of the evidence presented to various commissions, but cases are often found where separate witnesses make statements which are mutually conflicting. As a rule, too, the statements of wages found in the reports of factory inspectors are reliable, as they are made by disinterested witnesses, and are often taken from the wagebooks of the establishments they visited. In such cases they would generally be without bias.

As a preliminary view of the subject, we may pass under notice the few attempts which have been made to estimate the wages of female workers at various periods. The earliest statements for this purpose are found in Arthur Young's "Northern Tour," where, in 1768, the following are given as the current

wages of women and girls:-

Weekly Wages in 1768.1

Place.	Industry.	Women.	Girls.
Bedford Sheffield Leeds Fremington Kendal Manchester Burslem Warrington Newcastle Worcester	Lace Plaiting Cloth Lead mines Stockings, &c. Fustians, &c. Pottery Sailcloths Shoes, hats Glass, pottery	s. d. 4 6 4 - 3 6 6 3 3 5 4 6 6 4 6 4 6	s, d, 4 - 3 - 1 8 3 3 2 - 2 5 2 6 1 - 2 3
Genera	4 7	2 8	

Sir F. M. Eden, in 1795—6, made the next great inquiry, but only a few of his figures are comparable with those of Young. A selection of the most important details is given in the table on p. 259.

After Eden there are no detailed statements until the wage census of 1886, but there are three estimates by Leoni Levi which afford some basis of comparison. Levi's object was to

¹ Quoted from E. Young, "Wages in Europe and America," Washington, 1878, p. 159.

Wages of Women and Girls, 1795-6.1

Manchester				
Manchester Cotton 8 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 -		Occupations.		
	Cumberland Bristol Birmingham Buckinghamshire Derby Derby Bury Skipton Skipton Colchester Trowbridge Nottingham	Woolspinning Cotton Buttons, buckles, &c Lace Cotton and silk mills Cotton Woolspinning Cotton, 1794 Cotton, 1796 Weavers. Wooldressing Lace (women and children) Cotton (women and children)	8 - 3 - 75. to 10s. 4s. to 4s. 6d 3s. to 5s. 3s. to 5s. 3s. to 5s. 3s. 6d. 5s. to 5s. 6d. 5s. to 5s. 6d. 5s. to 6d. to 4s.	Is. 6d. to 3s. Is. to 2s. 6d. Is. to 5s.

estimate the total earnings of the wage-earning class, and his details are merely subsidiary to the main purpose. His estimates for women and girls are :-

Farnings ber annum 2

	1866.	1884.	Increase per cent.
Women over 20 years, under 20 years	£ s. d. 28 18 - 20 2 -	£ s. d. 36 14 - 23 2 -	27 15

Weekly Earnings.

	1866.	1878.	Increase per cent.		
Women over 20 years	s. d. 11 – 8 –	s. d. 13 8 9 0	24 12		

¹ Eden, "State of the Poor," passim.
2 Levi, "Wages and Earnings of the Working Classes," 1867 and 1885;
and "The Year Book of Facts," 1879.

In each case he estimates the number of women over twenty years of age as approximately double those under twenty years. Allowing for these numbers, we have the following percentages of increase:—

1866.	1878.	1884.
100	120	123

In his estimate for 1866 the annual earnings are based on fifty-two weeks' work in the year for women over twenty years of age, and fifty weeks for those under twenty years. On the same basis the wages in 1884 would be:—

The number of weeks assumed to be worked in the year by women over twenty years is obviously too high; but as they stand, these estimates give the following results:—

	1866.	1878.	1884.		
Wages of female workers	s. d.	s. d. 12 I	s. d. 12 5		

Coming now to the Wage Census taken by the Board of Trade in 1886, it is unfortunate that the Census figures are not comparable with the estimates of Levi, owing to the difference in the age groups selected. In many cases a young woman of eighteen years is earning wages as high as the average of women in the industry, and even below that age, in the cotton and other textile industries, the earnings are often more than we usually associate with the labour of girls. In the following table "women" are eighteen years and above, and "girls" are under eighteen years:—

Numbers and Wages of Women and Girls as returned at the Wage Census, 1886.1

Industry.	Wo	MEN.	Gr	RLS.	AVERAGE WAGE WOMEN
INDUSTRI.	Numbers.	Wage.	Numbers.	Wage.	AND GIRLS COMBINED.
_		s. d		s. d.	s. d.
Cotton	63,308	15 3		6 10	13 1
Wool	16,639	13 3		7 5	12 3
Worsted and stuff	16,925	11 11		6 2	10 3
Linen	21,939	8 11	6,691	4 11	7 II 8 q
Jute	10,909	9 7	2,289	1 -	8 11
Silk	1,298	9 8	1,813		8 11
Carpet	1,326	II I	526	5 8	9 11
Hosiery	2,196	11 6	194	8 3	11 3
Lace	868	12 8	269	6 2	11 -
Small wares	7,788	10 9	2,251	5 9	10 5
Flock and shoddy	395	9 9	6	4 6	9 9
Coal, iron ore, and iron-					
stone mines	369	8 2	119	5 7	7 6
Metalliferous mines	251	5 10	112	4 9	5 6 6 9
China, clay, &c., works	8	6 9	1 -	_	6 9
Roads, pavements, and					<u> </u>
sewers	52	9 -			9 -
Tinplate works	507	10 4	180	6 11	96
wares		TO TT	1 47	6 2	II I
Boot and shoe making	110	12 11	41	6 2	11 1
(factory)	867	12 6	334	5 6	10 7
Distilleries	II	9 5]	9 5
Brick, tile, &c., making	260	9 4	46	7 7	
Chemical manure works	33	8 9		''	9 - 8 9
Railway carriage and			1		
waggon building	12	13 3	4	7 -	11 9
Printing and engraving,					_
large works	406	11 9	517	5 7	8 4
Printing and engraving,					
small works	36	10 7	95	6 2	7 5
Printing and engraving,		70.	26	6 6	0.77
newspaper works	14 218	12 2	36	6 6 4 II	9 11
Tailoring (indoor) Dressmaking	616	15 7	15	,	14 10 12 -
Millinery	106	13 5 13 2	62	,	11 8
Mantle making	306	13 2 14 5	36	· 4 3	13 4
Baby linen and under-	300	14 3	30	4 4	-5 4
clothing (indoor)	358	12 8	63	3 10	11 4
Hair	467)	71)	,
Elastic web	376	9 10	187	5 11	8 10
Candlewick	128		80		
	154,294	12 8	50,046	$6 \ 3^{\frac{1}{2}}$	11 3
			1		

¹ Wage Census, passim. For command numbers, see "Bibliography."

Our last general table comes from the Labour Commission, and the statements it contains illustrate the large number of employments which could be treated historically if the materials were procurable. Some of the statements are apparently much too high, others seem below what would be expected on examination of the previous table. In all probability it would be unsafe to use any statement contained in it for comparison with statements for earlier periods, because of the method used by Mr. Drage for calculating the averages. No allowance seems to have been made for the different proportions of women and girls employed in each industry, and each statement is simply the arithmetic mean of a large or small number of statements made by various witnesses, or by the Lady Commissioners. Notwithstanding the discrepancies, the resulting average appears to be not far from the truth, and if anything is a little too low, because of the larger number who are employed in those industries in which the average wage is said to be above 11s. 5d., as compared with those in which the average is below that amount.

Wages of Women and Girls, 1891-2.1

Industries or Occupations.	Weekly Wage.
Shop assistants Printing (? compositors) Straw-hat making Barmaids, waitresses, &c. Cotton Shirt and collar manufacture Boot and shoes Millinery, dress and mantle making. Hosiery Rubber works and brush making. Carpets Watches and jewellery Silk and poplin Tailoring. Laundresses Linen, jute and flax Wool Tinplate, tin-stamping, enamel, &c., works Miscellaneous trades Worsted Miscellaneous clothing Umbrellas	S. d. 18 - 16 - 14 4 13 8 13 4 13 3 12 11 12 7 12 6 12 4 12 2 12 2 11 9 11 6 11 6 11 4 11 4 10 2 10 2 10 1
	_

¹ Labour Commission, Final Report, Part II., p. 476.

Wages of Women and Girls, 1891-2-continued.

Industries or Occupations.	Weekly Wage.
Iron and steel Bookbinding, sewing and folding Lead, matches and colour Food Fustian and velvet cutting. Shoddy and flock Sailmaking, ropemaking, rag picking. Straw-plaiting.	s. d. 9 9 9 9 9 4 8 5 8 3 7 6 7 1 4 6
Mean of above	11 5

These sets of averages point to considerable advances since the days of Eden and Young, but beyond that they are of little use for our present purposes. They indicate the way wages have moved, but they do not tell us with sufficient detail how much they have moved, and a more detailed account is necessary. In the following pages we shall consider in detail the history of wages in the cotton trade, and after glancing cursorily at wages in the jute trade, attempt to arrive at some general conclusions respecting the movements of the wages of a large group of women workers. To consider in detail all the industries for which we have records would prolong our chapter without serving any useful purpose, and the cotton industry is so treated mainly as an illustration of the methods used in preparing the index numbers for other trades, which are given below.

There are several reasons why the industry we select for the most detailed comparison should be the cotton industry. It has been, after agriculture, the favourite ground of investigators; it is the great example of a centralised and highly-organised industry; it has been the subject of more Factory Acts than any other industry; and the material is more abundant and reliable, and comes from more diverse sources, than that for any other trade in which women are employed.

In considering the wages of cotton operatives, the first convenient period to take is from the early part of the last century to 1832, the year previous to the complete account of wages furnished to the Committee on Manufactures, Commerce, and Shipping. Wages, it is true, are only given for a few

occupations, but from 1810 to 1832 they are continuous and apparently reliable. For Manchester we have the following account1:-

	18:	10.	18	11.	18	12.	18:	13.	181.	4-5.	.1816	-22.	1823	3-5.	1832.
Women spin- ners Reelers		d. 	_								s. 17 10	d		d. 9	105., 155.
	II		5	6	10	I	8	8	10	-	9	-	7	-	75., 95.

The account for throstle spinners throws some light on the state of trade in each year, as the time rate and actual earnings are given by the same authority2 from 1803 to 1833. The figures are:-

	1803.		93. 1805.		1813.		1818.		1823.		1828.		1833.	
Throstle eninners	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
Throstle spinners, nominal wage Throstle spinners, actual earnings	9		1	-					1					
	10	$I\frac{1}{2}$	7	51/2	9	6	10	5	9	31/2	9	I	8	51/2

Power-loom weavers are also mentioned early. Banks puts the date³ of the introduction of the power-loom at Preston as 1826—7, but the records for Hyde commence in 1816. wages for young persons of both sexes were 4:—

	1816.	1821.	1826.	1831.		
Power-loom weavers	s. d. 14 -	s. d.	s. d.	s. d.		

These figures have been frequently quoted with estimates for later years, and this makes them of great service.

From these records we gather that in the factories, after the

 ^{&#}x27;' Returns of Wages," pp. 5, 6, and 9.
 Committee on Manufactures, Commerce and Shipping, 1833.
 Banks, "A Short Sketch of the Cotton Trade," 1888.
 '' Returns of Wages," p. 7.

close of the war, a fall took place, but how far this fall was connected with the more rapid fall of the hand-loom weavers' wage is not certain. It is highly probable that this depression, caused in the first place by the introduction of the power-loom, had the effect of bringing down the wages of factory workers by increasing the available supply of these at a rapid rate. When the depression came the higher earnings to be obtained at the new power-looms were a great temptation to the hitherto badly paid domestic female workers, and the numbers so employed increased at the expense of the male hand-worker. Some hand-weaving was done by women as well as by men, but the records rarely make it clear whether the work referred to was done by men or women. It is certain, however, that the fall in the earnings of both was rapid and great. Further, it is also probable that the fall was in nearly equal proportion, and in 1830-40 the earnings of women at the hand-looms were not above 3s. to 4s. weekly, except in a few cases where the power-loom had not yet been introduced to do that special class of work.1

The next series of statistics comes from the "Returns of Wages," and as "Manchester and Neighbourhood" (a very wide district) is the only place for which wages are given in this blue book over a number of years, the figures have a special value. We need not stay to discuss them now, as the method of obtaining an index number from these and other figures can be more conveniently discussed later, but the table on p. 266 clearly illustrates the kind of records to be found for almost all the textile industries.

In this table the figures for 1839, 1849, and 1859 were collected by David Chadwick, and, with estimates for other Lancashire industries, were presented to the Royal Statistical Society, and were afterwards made the model on which inquiries by various Chambers of Commerce for the Board of Trade were based. They have thus been used by subsequent investigators, and the figures on p. 268 appear to have been collected for the purpose of direct comparison with them.

These statements by no means exhaust our material for Manchester, and a series of shorter tables is given in a paper by the present writer in the "Statistical Journal," June, 1902. Turning now to those figures which are said to be

Turning now to those figures which are said to be representative of the whole industry, we find seven principal statements, each of value. These statements are given in the table on p. 267.

¹ Commission on Hand-loom Weavers, 1840, passim. ² Vide Journal, 1860.

Wages of Women and Girls in the Cotton Industry (Manchester and Neighbourhood).1

1877. 1880. 1883.	5. d. 5. d. 5. d. 13 6 8 6 8 6 175. 6d., 185. 7d. 145., 155. 4d. 14 3 165. 6d., 185. (G.) 75. 3d. 14 3 175. 6d. 145. 14 3 135. 4d., 155. 155. 14 13 125., 125. 135. 135. 13 13 185., 195. 185., 195. 13 13 13 205., 245. 205., 245. 12 12 13
1874.	5. d. 8s., 14s. 12 - 12 - 11s., 16s. 10s., 11s. 6d. 10s., 15s. 12s.
1859.	s. d. 8 - 8 - 9 - 9 - 9 - 9 - 15s., 10s. 9d. 15s., 16s.
1849.	3. d. 7 6 7 6 9 9 6 9 9 1 9 1 9 5 1 9 1 9
1839.	\$. d. 7 - 6 7 6 6 7 - 7 8 6 7 - 7 9 5, 105. 165., 175.
	Cardminders

"Returns of Wages," pp. 47-51.

Representative Statements of Wages in the Cotton Trade (Women and Girls).

	MII BNDIX A.		2
1891—2.	\begin{align*} \begin{align*} \sum_{18} & - & \\ \text{18} & 6 & \\ \text{21} & - & \\ \text{21} & - & \\ \text{17} & 3 & \\ \text{15} & 3 & \\ \text{16} & 9 & \\ \text{14} & -1 & \\ \end{align*} \begin{align*} \text{55. 6d. per loom.} \end{align*}	19 3	Labour Commission.
1886.	5. d. 16 11 7 1 1 12 3 12 7 12 3 12 7 12 2 12 9 15 10 15 10 15 10 15 10 16 11	16 2	Wage Census.
1882.	7. d, 5. d, 14 - 205. d, 14 - 205. d, 14 - 206 e, 14 - 206 e, 15 e, 16 e	16s. 6d.	Ellison.
1876.	5. d. 5. d. 10 3 20 - 1 114 - 18 - 1 - 18 - 1 - 175. 6d. 9 - 15 - 1 12 - 14 - 1 12 - 14 - 1 14. to 6s.	145.	Bevan.
1871.	5. d. 5. d. 13 - 16 6 16 - 20 - 16 17 - 13s. 17 - 15s. 11 6 12 - 15 11 6 12 - 15 11 6 12 - 15 11 6 20 - 16 11 - 14 - 17	135.	Bevan.
1848.	8 8 8 8 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	1 6	Factory Inspectors.
1833.	8 7 7 8 7 7 8 8 9 9 9 9 9 9 9 9 9 9 9 9	IO IO	Ure.
	Slubbers Slubbers Rover Intermediate Jack Bobbin Drawing frame Little Winders Winders Warpers Throstle spinners. Scavengers Weavers, 2 looms " 4 "	Weavers' average	Authorities

1 Ring and throstle.

Miscellaneous Cotton Wages (Manchester).

	1859.	1873.	1876.	1882.	1887.	1893.
Scutchers Throstle reelers Draw frame tenters Bobbin and fly,	s. d. 8 - 9 6	s. d. 12 – 12 6	s. d. 13 6 13 2	s. d. s. d. 12 - 15 - 14 - 20 - 12 6 18 6	s. d. s. d.	
rover and jack tenters Throstle spinners Ring spinners Winders Doublers	9 - 9 - 9 - 9 -		_	14 - 20 - 12 - 14 - - 10 - 20 -		125., 155.
Weavers, 2 looms ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	10s., 10s. 9d. 15s., 16s. 16s., 20s.	_ _ _	_ _ _ _		16 - 19 - 20 - 25 6 29 - 32 -	15s. 27s.
Authorities	" Returns."	E.Young.	Bevan.	Ellison.	Chadwick.	Merttens.

In Scotland, where a different class of work is done, wages seem to have taken a different course. A table from the Report of the Factory Inspectors for 1883 will serve to illustrate the relation of Scotch wages to those of Lancashire. The comparative decline of the trade during recent years allows us to ignore, for the purpose of constructing index numbers, the absence of data for later years.

Cotton Operatives' Wages at Glasgow.1

	1856.	1860.	1870.	1875.	1883.
Packing-room hands Drawers Throstle spinners Mule spinners. Weavers	s. d. 5 7 5 5 3 7 6 7 6 9	s. d. 5 10 6 8 4 9 8 0 7 3	s. d. 6 8 9 1 6 8 10 3 9 4	s. d. 7 10 9 4 8 10 11 8 10 2	s. d. 7 - 8 5 7 5 9 4 9 6
Index numbers	67	78	101	115	100

¹ Report of H.M. Inspectors of Factories, October, 1883. Mr. Henderson's Report.

Mule-spinners do not appear in the tables for Lancashire after the earlier years, and we read that women cannot stand the strain of attending to a pair of modern self-acting spinning frames. In Scotland a very much larger proportion of women is to be found in the spinning department of a cotton factory than is the case in England, and as a consequence the output from the same kind of machinery is much less.¹ Another table given by the same authority confirms the figures given in this one, which, he says, "best represents the average rates."

Our problem is, given the previous and other statements, to

Our problem is, given the previous and other statements, to find the changes in the average wage. For this purpose we have two reliable averages, namely, that given by Ure in the appendix to his "Cotton Trade," and the Wage Census. An

age group in 1833 was2:-

Age.	Number.	Average wage.							
9—10 years 10—12 ,, 12—14 ,, 14—16 ,, 16—18 ,, 18—21 ,, 21 and upwards	290 538 761 797 1,068 1,582 3,910	s. d. $ \begin{vmatrix} 2 & 1 & 1 & \frac{1}{2} \\ 3 & 9 & \frac{1}{2} \\ 4 & 1 & 0 & \frac{1}{2} \\ 6 & 4 & \frac{3}{4} \\ 8 & 0 & \frac{1}{2} \end{vmatrix} = 3.454; \text{ average wage 5s. } 10 & \frac{1}{2}d.$ $ \begin{vmatrix} 8 & 1 & 1 \\ 9 & 6 & \frac{1}{2} \end{vmatrix} = 5.492; \text{ average wage 9s. } 4 & \frac{1}{2}d.$ $ 8 & 0 & \frac{1}{4} $							

The total number included in the returns were 8,289 males and 8,946 females, so that these wages refer to 52 per cent. of those employed. We have no "age" group for 1886, but we can calculate the average by means of a grouping by earnings. For Manchester the returns show 3:—

Earnings.	Number of Women.	Girls.
From 2s. to 5s. ,, 5s. to 10s. ,, 10s. to 15s. ,, 15s. and upwards.	3,511 534	298 652 463
	4,045	1,413

¹ Report of H.M. Inspectors of Factories, October, 1883. Mr. Henderson's Report.

Henderson's Report.

² Ure, "Cotton Trade," 1835, Vol. I., Appendix.

³ Wage Census. Report on Principal Textiles.

The average wage for women was 12s. 9d.; for girls, 8s. 6d.; and for women and girls combined was 11s. 9d. if the half-timers are excluded, and 11s. 8½d. if they are included. This shows an advance for female workers of 46 per cent. since 1833, as compared with an advance of 42 per cent. for all employed.

We have now to fit in the intermediate years.

We may remark in passing a curious illustration of the principle that the average wage of all employed in an industry may increase by a higher or lower percentage rate than the average of any particular class of workers in that industry. In this case the proportion of girls has fallen in relation to women, and the average wage of all female workers has increased through a process of transition from a lowly-paid occupation to one better remunerated. The opposite process may also be seen in this industry, for the relative proportion of male adults has fallen, and though their wages have increased largely, the average wage for all engaged in the industry has not increased by so large a percentage. Roughly, the wages of girls and boys have increased by a larger percentage than those of women or men, but this has been balanced by a decrease in the relative proportions of those under eighteen years and of men, so that the average increase for girls, 45 per cent., is practically that for women and girls combined, but men's wages have increased in greater proportion, their numbers having fallen. The average increase for all cotton operatives in the Manchester district was 42 per cent.1

The "pivot" points2 are, for Manchester, as indicated by

these calculations:—

1833.	1886.
100	146

but for the whole industry in Lancashire a similar calculation shows—

1833.	1886.
100	162

¹ Bowley, "Wages in the United Kingdom," Cambridge, 1900. Section, "Cotton."

² I.e., Rates of advance between the two Censuses.

and this greater percentage is caused by the declining importance of Manchester as a manufacturing centre, and the relative growth of other centres (as Oldham, &c.), where wages were lower in 1833 than in Manchester, but are now higher. This, indeed, is another illustration of the fact that an increase in the proportion of workers in the better-paid branches of an industry may cause the average wage to increase at a greater rate than the wages of the sections comprised in the returns. We may, therefore, adopt 162 as our average level in 1886. From the tables we have reviewed, and other miscellaneous data, we have for Manchester the following ratios:-

1810 125 1854-5 99 1815-6 115 1859-61 105 1819 111 1870-71 123 1824 109 1874 147 1833 100 1877 162				
1846 98 1883 163 1849-51 98 1886 146	1815-6 1819 1824 1833 1839-41	115 111 109 100 90 98	1859-61 1870-71 1874 1877 1880 1883	105 123 147 162 160 163

The decreased importance of Manchester makes it practically unimportant that we have not later figures for this centre. During recent years the movement of women's wages is better represented by Oldham workers in spinning, and in weaving by the workers of Blackburn and district. For Oldham we have the following numbers2:-

1833.	1883.	1886.	1891.	1893.	1901.
88	168	162	175	170	190

with the changes in the standard list to indicate in what years there were general movements, and for Blackburn³ we have the following details:-

Containing 75 per cent, of the looms of the United Kingdom.
 "Returns of Wages," Wage Census, and private investigations.
 Wage Census and private investigations.

	1886.	1891-2.	1901.	No. in Returns, 1886.	Percentage of Women and Girls in Return, 1886.		
Weavers, per	s. d.	s. d.	s. d.				
loom Winders,	5 2	5 6	5 9	4,940	53		
average	13 2	_	16 -	1,407	15		

Taking 162 as the standard for 1886, we have an increase to 180 for weavers and to 192 for winders, and by weighting these results in the proportions shown in the last column we obtain 172 for 1891—2, and 187 for 1901. This consilience leaves little room to doubt the approximate accuracy of our later figures, and by examination of all the data we get, within fair limits, the following index numbers for all female workers in the industry:—

1810 125	1859-61	105
1815–17 115	1866	120
1819–20 111	1870-1	123
1824 109	1874	150
1833 100	1877	165
1836 96	1880	160
1839–41 90	1883	160
1846 98	1886	162
1849–51 98	1891–2	173
1854–5 99	1901	188

Some points of interest in these numbers are noticed later on, but it is a matter for regret that in dealing with the other industries which will come under our notice, the material is by no means so complete, or capable of such critical analysis. As far as possible, however, the methods which have been illustrated have been used throughout, and are applicable to all industries for which we have sufficient material.

THE JUTE INDUSTRY.

In examining the records of wages in the jute industry, we have the advantage of dealing with one of the most definitely localised industries in which women are employed. There are

from sixty-five to seventy thousand operatives employed in the trade, and of these 90 per cent. are said to be employed in Dundee and the immediate neighbourhood. For the purpose of women's wages the industry is most important, as 68 per cent. of the operatives are females, and 65 per cent. are above thirteen years of age. Fortunately the records are fairly complete and consistent, so that we may be tolerably sure of our results.

Jute manufacture was introduced into Dundee in 1835,³ but the manufacturers, whether using jute or not, called themselves flax-spinners for some time afterwards. Indeed, the wages paid to jute operatives are often said to be applicable to linen also, and vice versā. The "Returns of Wages" do not contain statements for jute until 1858, and we cannot, therefore, carry our index numbers back farther than this year. But it is certain that wages throughout the district rose considerably between 1835 and 1858, and Miss Collet makes comparison of a group of wages distributed according to ages employed in linen in 1833, with linen and jute in 1896.³ Perhaps for our present purpose it will be best to commence with 1860, and the following table shows the earnings of certain women and girls in Dundee from 1860 to 1891—2. These are taken, for 1860 to 1883, from the "Returns of Wages," for 1886 from the Wage Census, and for 1891—2 from the Labour Commission, Reports of the Assistant Lady Commissioners.

Wages in the Jute Industry.4

	1860. 1863.			1866.		1867—8.			1871.					
Preparers for	s. d.	s. d.	5.	d.	s.	d.	s.	d.	5.	d.	s.	d.	5.	d.
spinning Spinners, girls	_	7_3	8 7	_	9	-	7	9	9 7	3 6	8 5	3	9	uma
,, women Reelers	6 9	7 9	10	- 6			9	_	9	,6 -	8	9	9	3
Winders			10	9	12	4	7	6	13	6	9	-	14	
Warpers	8 6	9 6	8	6	14	7 4	9	9	14	9	9	6	12	_

¹ Labour Commission, Précis of Evidence, Group C., Part i., p. 31.

Miss Collet, Report to the Board of Trade, C. 8795, 1898, p. 18.
 Ob. cit.

⁴ Compiled from "Returns of Wages," Wage Census, and Labour commission, Group C., Vol. I.

Wages in the Jute Industry-continued.

	1874.		. 1877.		1880.		1883.				1886.		1891-2			
Preparers for spinning Spinners, girls ,, women Reelers	5. 10 7 10	d. 9 9 6 6	s. 15 12 12	d. - -	s. 10 7 10	d. 3 6 6	s. d. 9 3 5 9 9 -	. 64	11	d. 	s. - - 13 16	d.	s. 8 8	d. 6 3 {	s. 10	d. 2 - 6
Winders Warpers	11 12 11	_	12 16 12	3 7 6	11 13	6 6	11s.6d.,13 11 3 15 3 11 -	s. ou.	14 12 11	6	14	6	10 10 12 10		13 13 16 14	1 - 4 6

This table contains practically all the women's occupations for which the returns are complete, and probably represents at least two-thirds of the women and girls employed. Other than this, the most important evidence is contained in the following tables, given by Miss Collet in the Report referred to:—

Comparison of 1886 and 1896.1 (Average weekly earnings.)

Women and	Sı	PINNING	BRANC	н.	Weaving Branch.				
	18	86.	189	6.	188	36.	1896.		
GIRLS.	Average Rate.	Number in Returns.	Average Rate.	Number in Returns.	Average Rate.	Number in Returns.	Average . Rate.	Number in Returns.	
Half-timers* Full-timers	s. d. 2 5 8 0	667 3,909	s. d. 3 2 10 5	188 950	s. d. 2 5 10 7	17 4,781	s. d. 2 7 15 6	12 349	

^{* 1886, 10} years and upwards; 1896, 11 years and upwards.

To assist us in obtaining intermediate numbers, we have an account of changes in the level of the "list" prices, taken for 1871 to 1872 from the Report of the Factory Inspector for 1883, and for the succeeding years from Miss Collet's Report.²

¹ Collet, op. cit., p. 29.

Changes in Dundee Jute Wages.

			Was	ges of	
	Rise per cent.	Fall per cent.	Spinners, 80 Spools.	Half- Timers.	
February, 1871 September, 1871 January, 1872 March, 1872 June, 1873 July, 1873 January, 1875 May, 1875 July, 1875 November, 1875 August, 1877 November, 1878 February, 1879 January, 1883 March, 1884 July, 1884 November, 1884 November, 1884 November, 1884 September, 1885 July, 1884 September, 1885 July, 1884 September, 1885 September, 1886 January, 1887 September, 1888 December, 1888 September, 1888 September, 1888 September, 1888 September, 1888 September, 1888 September, 1889 February, 1890\$ May, 1892	5555 5 5 55555		s. d.	s. d. 3 4 3 6 3 5 3 1 2 11 3 1 3 - 2 10 2 8 2 10 2 8 2 10 3 2 3 4 3 2 3 2 3 4 3 2 3 - 2 11 2 9 2 11 3 - 3 2 3 4 3 6 3 4 3 6 3 4	
Totals	70	57½ and 60		-	

* Wages reduced by operation of new Factory Act. † Five weeks' strike against 10 per cent. reduction.

Piece hands only.

§ Mill hands, reelers, and winders only.

The wages of spinners and half-timers appear to be hypothetical rates, for none of the rates for these operatives given in the previous tables, or in other lists of jute operatives' wages, agree with them. What is of value in the table is the account of the dates of general changes, which enables us to fill in

intermediate numbers if necessary, when we have calculated the ratios from the "Returns" series. As a rule in the textile industries the amounts of the changes in the standard list do not measure the actual changes in earnings, because the increased speed of the machinery and the advance in the skill of the operatives cause an increase in wages apart from these general changes. Miss Collet's table, comparing 1886 with 1896, shows this to have taken place in the jute industry. the spinning branch the increase in the "list" was 20 per cent., but the average wage increased from 8s. to 10s. 5d., or 10d. more than would have been the case if there had been no increase apart from "list" changes. In the weaving branch this is even more clearly shown. Here the average wage would have advanced from 10s. 7d. to 12s. 8d. if there had been no other cause for increase than the 20 per cent. advance in "list" prices, but the increase was to 15s. 6d., or by 46 per This tendency to increase on the part of piece workers was explicitly recognised 1 in 1884, when only this class of workers suffered a reduction, for the reason that their wages had increased in greater proportion than those of "day" hands.

The index numbers indicated by the "Returns" table, &c.,

are as follows :-

1858	98	1880	132
1860	100	1883	162
1863	107	1886	122
1866	137	1891–2	162
1871	124	1896	165
1874	150	1900	173

The records of changes in the general list, however, serve a useful purpose by enabling us to test the probable value of a seemingly inflated or depressed number, arrived at in the construction of ratios. In the above series the number for 1883 seems much inflated, and that for 1886 much depressed. Assuming that 132 accurately represents the level for 1880, the increase of 10 per cent. by 1883 would yield 145 as the level for 1883, and our number seems 17 points too high. But the jute trade was feverishly busy during this year, and the "Returns" series indicate a higher level than 1874, the previous maximum. We may conclude from this that the

¹ Collet, op. cit., p. 29.

level was above 150, and probably not much below 162. From 1883 to 1886 the reductions were 25 and $27\frac{1}{2}$ per cent., and this would give us 120, or practically the number in the table. The 25 per cent. increase from 1886 to 1890 was a return to the level of 1883, and Miss Collet's comparison gives us the figure for 1896. In 1899 another increase of 5 per cent. took

place, and this gives us 173 for 1900.

Having illustrated the methods by which index numbers of wages may be constructed, we may now consider those trades for which we have sufficient material to enable us to calculate the changes in wages. The cases in which we get fairly continuous records are mainly confined to the textile industries, but we have also useful series for the pottery and boot and shoe industries. The changes as compared with 1866 are shown in the table on p. 278, this year being chosen as the basis of comparison because it is that for which we have a

figure for each industry.

Although since 1866 advances have been general, the results for recent years show that wages in some trades have risen much more than in others. The great increase in the cotton trade is most noticeable, as this industry has been the subject of more Factory Acts than any other. In the three woollen trades there are signs of sympathetic movements, which in a measure verify our numbers. In each case there was a rise after 1860, culminating in the middle of the seventies, and a subsequent fall, which ended about 1891. In each case, also, there has been a slight rise since that date. Nearly all the industries suffered a fall after the inflation of 1872—4, and the effects of that inflation may be seen in the preponderance of increases from 1870 to 1874, and the increase in the general average of over 10 per cent.

To afford a means of comparison of the actual earnings at separate periods, as distinct from their relative changes, some of the numbers in the table on p. 278 have been turned into estimated average weekly earnings at various years, on the

basis of the average wage given in the Wage Census.

The table on p. 279 is given with some hesitation, and it must be used with caution. It is not given as stating that the average wage of all women and girls in 1900 was 12s. 4d., but it is intended to show that of that group of workers whose wage was 11s. 3d. in 1886, the wage in certain other years was approximately the amount stated in the general average. Neither must it be read as showing that the average wage in either of the industries was the amount stated in the columns, except on the hypothesis that the average in 1886 was the amount given for

Table showing Changes in Average Wages of Women and Girls. Calculated on the Basis of 1866 = 100.

1900	160 108 105 115 120 120 140	127	128 142 136	128
1833. 1840. 1845. 1850. 1855. 1860. 1863. 1866. 1870. 1874. 1877. 1880. 1883. 1886. 1891. 1895. 1900.	147 105 100 1112 115 120 137	120	125	125
1891.	144 105 100 110 110 120 130 136	611	125 135 135	123
1886.	136 110 110 110 105 89 120 120 131	115		117
1883.	139 110 110 118 118 115 115 145 145 135	125	111 128 128 133 123 111	125
1880.	133 120 122 122 116 98 143 123 135	124	108 126 130 130 149 125	124
1877.	137 125 124 125 116 102 146 130	125	108 132 124 128 121 121	126
1874.	131 111 121 133 105 109 146	122	135 124	122
1870.	103 103 119 106 91 119	107	108 102 103 101 110	108
1866.	100 100 100 100 100 100 100 100	100	000 I 1000 I 100	100
1863.	1118818811	96	96 3	93
1860.	88 89 84 85 77 77	85	99 99 99 99 99 99	92
1855.	833	78	91 95 95 100 100	83
1850.	82 70	78	83 100 100 83	79
1845.	82 67	77		78
1840.	75 80 81 70	75	79 100 83	26
1833.	83 71 71 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	75	1 1 2	74
1824	92 74 67	78		77
INDUSTRY.	Cotton Wool Shoddy Worsted Linen and flax Jute Silk Lace Hosiery	Average, textiles, &c.	Printing	Average

Estimated Average Weekly Earnings of Women and Girls in certain Industries.

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		Cotton Wool Shoddy Linen and flax Jute Lace Lace Hrosiery Printing Shoes Shoes	General average women age women and girls in industries in previous table
		gy md	sneral ave age wome and girls industries in previou table
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		Cotton Shoddy Worsted Linen an Jute Silk Lace Hosiery Printing Boots Shoots	Gen ag in in in
		OF OF HOUSEHHIM	

that year. The Wage Census being correct, these figures are, generally speaking, correct to within 6d. per week. Here arises the question, To how large a group do the final figures refer? The Wage Census figures refer to 154,294 women, 50,046 girls, or a total of 204,340 females. This seems a reliable "sample" to take, and if this is so we may infer that our final figures represent the average wage, within limits, of the women and girls employed in the industries concerned.

It must be noted, however, that there are considerable omissions from the table of index numbers. We get some idea of the extent of these omissions from the census figures of

1891, in which there are returned—

			girls.
As occu	pied ir	domestic service	2,170,233
,,	,,	professional occupations	287,334
,,	>>	dress	883,824
,,	,,	mineral substances	77,956

The total number of all returned as occupied is 5,081,493, and we know that of these at least 3,000,000 are engaged in occupations of which the Wage Census takes no account. To what industries then do our figures refer? The factory returns for 1898 show the numbers of females engaged in some of the industries included in our index numbers to be in—

Cotton fac	ctories		328,406
Woollen	.,,		61,039
Worsted	17		82,568
Shoddy	,,		6,611
Flax	,,		71,211
Jute	11		29,254
Silk	2.5		25,137
Hosiery	,,		26,079
Lace	**		6,519
	Tot	al of above	636,824

Thus, the index number for the textiles, &c., may be said to represent, approximately, the changes in average wages of over 600,000 female workers. The inclusion of the other industries may probably bring this total up to three-fourths of a million, and we are enabled to say, therefore, that if these workers earned on an average 11s. 3d. weekly in 1886, their

predecessors in the same group of employments in 1824-50

earned about 7s. to 7s. 6d.

Comparison of our results with those of Leone Levi suggests that they are approximately representative of a much wider group of workers than those we have named, and that workers in other industries have received advances of wages similar in extent to those obtained by the group we have reviewed, taken as a whole. Levi's three estimates were made on a much more comprehensive basis than that on which our index numbers have been compiled, and his results were:—

	1866,	1878.	1884.	
Average weekly earnings	s. d.	s. d.	s. d. 12 5	
Ratios	100	121	124	

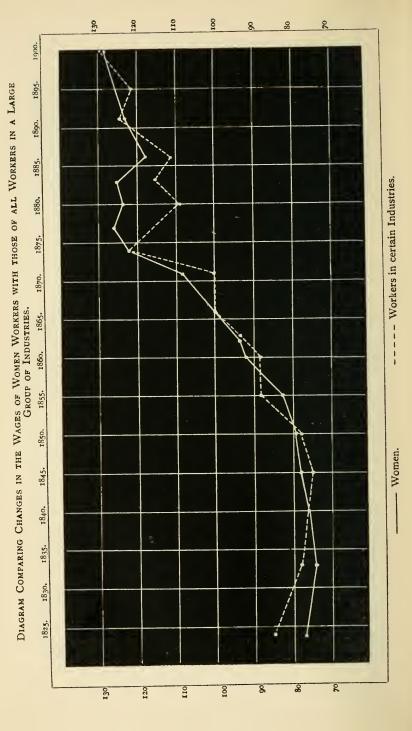
For our nearest years we get-

	1866.	1877.	1883.	
Average weekly earnings	s. d., 9 7	s. d. 12 1	s. d.	
Ratios	100	126	123	

or about the same percentage over the whole period, but with a difference of 5 per cent. in the advances from 1866 to 1877—8.¹ Closer results from two so different methods could scarcely be expected, and the approximation supports the suggestion that our results are representative of as wide a group as was covered by Levi's estimates.

It is interesting to compare the changes of wages of female workers with the changes, calculated by similar methods, of

¹ The difference of direction in the six years 1877—8 to 1883—4 is not of great importance, as in such a time of change it is quite possible that there was a rise between 1878 and 1884, and a fall between 1877 and 1883. The year 1878 was more depressed than 1877.



the wages of workers in a large group of industries, in several of which men only are employed, and in the others both men and women. The course of wages of both sets are shown on the accompanying diagram, and summarising them by decades we find the following average levels:—

	Women and Girls.	Selected Industries. ¹
1820-30 1830-40 1840-50 1850-60 1860-70 1870-80 1880-90 1890-1900	58 56 58 62 75 93 95	66 63 61 68 75 92 91

From these numbers women's wages appear to have risen by a greater proportion than those of the larger group, and they also appear to have risen more regularly. The diagram shows that, on the whole, they have not been so fluctuating. This is probably due to the rapidity with which wages change in the coal and iron and steel industries, where women are not employed.

We may also compare, in several industries, the changes of the wages of female workers with those of all employed by

means of the following particulars²:—

		1860.	1866.	1870.	1874.	1877.	1880.	1883.	1886.	1891.
Cotton	All W. & G.	93 88	100	107	132 131	142	141	143 139	128 136	145
Wool	All W. & G.	95 89	100		115	120	110 120		103	98
Shoddy	All W. & G.		100	105	115 121	115	115	105	105 106	95

¹ The industries are cotton, wool, linen and flax, agriculture, building, coal, iron, compositors, and seamen.

² The numbers for all workers are taken from Mr. Bowley's paper in the Statistical Journal, June, 1895, and the section on "Cotton" in his "Wages in the United Kingdom," Cambridge, 1902.

		1860.	1866.	1870.	1874.	1877.	1880.	1883.	1886.	1891.
Worsted	All W. & G.	83 84	100	126	117	114 125	_	110	102 110	102 110
Compositors Printing	Men W.&G.	100 94	100	108	113 —	111	116	111	— —	121 125
Jute	All W. & G.	75 73	100	91	105	96 102	90 98	107	90 89	105
Linen and flax	All W. & G.	88 8 5	100	106	113		116	105	117	110

With two exceptions we find that women's wages have risen between 1866 and 1891 by a greater percentage than the average wage of all employed. This does not necessarily mean that they have risen by a greater percentage than those of men, for, as we have seen, both sets of workers might rise, but through the displacement of those at the higher wage by those at the lower (for example, by women being substituted for men), the net gain to all employed may not be so great as that of either. But this has scarcely been the case in the textiles, as the proportion of women employed in these industries has not increased at the expense of men. The greater advance of women's wages cannot, therefore, in these cases be due to this cause.

In the cotton trade they did not rise so quickly for a time, but have now caught up again. In the woollen and shoddy trades, where the net result of 1891 over 1866 was a slight reduction, the women and girls did not suffer so greatly, though from 1877 to 1891 their wages were reduced by a greater proportion than the average of all. This latter remark also applies to worsted, but the net result of 1891 over 1866 is a

decided increase.

II.

We have already seen that over a period of forty or fifty years there has been no decrease in women's wages, but that on the whole they have kept pace with, or increased in greater proportion than, the earnings of men in the same industry. It is evident, therefore, that the Factory Acts have had no permanent effect in reducing women's wages. It is difficult to say what effect particular Factory Acts have had on women's wages. There are many economic forces which affect wages, and several may be operating together. To isolate one phenomenon, and say that it caused a particular change of wages, is

almost impossible, and the most we can hope to do is to discover how wages moved in the industry affected after the introduction

of each particular Factory Act.

Here we find another limitation in the lack of sufficient reliable and comparable material for our purpose. In constructing index numbers of wages it is possible to compare statements not coming from the same authority, if we allow a sufficient margin for possible errors, since the errors involved tend to balance each other; but for the special purpose of comparing wages before and after the passing of the several Acts, it is obviously necessary that the estimates should be strictly comparable, and it is desirable that they should be made by the same authority. We are thus prevented from using a large proportion of the material which may be used in constructing index numbers, and must rely only on strictly comparable statements made by the same authority. Fortunately we have some material of this nature, chiefly in the "Returns of Wages," which contains statements made periodically to the Board of Trade by the Chambers of Commerce, and in the Reports of the Factory Inspectors. For the earlier Acts, 1802—1831, we have little or no material. They were not strictly enforced, however, and need not concern us here, but the Act of 1833 was administered by the newly-appointed Factory Inspectors. It applied to all textiles, with minor exceptions for silk. Report of the Inspector for 1841 contains a table of wages at Oldham, which throws some light on the course of wages in the cotton trade after the passing of that Act.

Wages in the Cotton Trade, Oldham.1

	· · · · · · · · · · · · · · · · · · ·		
	May, 1833.	1836–37.	1841.
Cardroom scavengers Drawing frame tenters Coarse bobbin Jack frame ,,, assistants. Calico weavers ,, assistants. Fustian ,, assistants. Piecers, 9—13 years ,, 13—17	s. d. 4 6 4 8 – 4s. 6d., 8s. 11s., 12s. 3 – 15 – 3 6 13 8 4 3	s. d. 5 6 9 - 6s., 8s. 6d. 12s., 13s. 6d. 4 6 15 - 4 - 13 6 4 9 4 - 6 3	s. d. 5 6 9 – 6s., 8s. 6d. 12s., 13s. 6d. 4 6 12 4½ 4 – 13 6 4 5 2 9 half-time
,, over 17 ,,	5 - 8 4	10 3	5 6 8 9

¹ H. C., 1842, Vol. XXII.

Here we find a distinct increase in the earnings of the operatives directly affected by the Act. This may have been due to the Act, or it may have been due to a change in the state of trade, which was depressed in 1833, brisk in 1836, and depressed again in 1841. It is clear that the Act did not

prevent wages from rising when trade was good.

The only other known evidence relating to textile wages at this time is the statement of Mr. A. Austen, in his Report to the Commission on the hand-loom weavers, that in the southwestern woollen district no change had taken place between 1828 and 1838 in the wages of operatives (men, women, and children). For eleven years no important Act was passed, but in 1844 a succession of changes commenced. The most notable feature of the Act of that year is that women's hours, which had hitherto been unregulated, were limited to 69 per week. We have wages for cotton at Manchester over this period as follows:—

	1843.			1844.			1845.1					
Throstle spinners	s. 8 6 3 7 3 9	d. 6 - - 6 - 3 8	5. 10 10 5 10 7 14 9	d 2 - 2 - 2 -	s. 8 7 3 8 4 9	d. 6 4 10	s. 10 10 5 10 7 14 9	d 8 - 2 -	s. 9 7 3 8 4 11	d. 6 6 6 - 6 3 6	s. 10 10 5 11 7 14 9	

Here a distinct rise is shown, which is substantiated by a table showing the average wage of all employed in spinning fine yarns, at a mill in Manchester. The average in 1844 was 10s. $4\frac{1}{4}d$. per week, and had risen to 10s. $10\frac{1}{4}d$. in 1845.² This change may have been connected with the state of trade, but from whatever reason the rise came, it is clear that the Act of 1844 did not in these instances reduce the wages of cotton operatives.

Coming now to the Ten Hours Act of 1847, we meet with singular difficulties owing to the intense depression of trade which attended its introduction.³ The hours were reduced from

¹ Macculloch's "Statistical Account of the British Empire," 1846, I., p. 696.

^{2&}quot; Returns of Wages." See below, p. 290.

³ See the evidence respecting this depression, cited in "Factory Legislation Considered," &c., by G. H. Wood. Appendix I., *Journ. Stat. Soc.*, June, 1902. See also *supra*, Chap. VI., pp. 97, 98.

69 to 58 per week, and until the introduction of the relay system all classes of textile operatives were affected, but so few of them were working full time at their maximum output that it is impossible to tell what effect the legal reduction of hours had on wages. The Act was soon evaded by means of the relay system; the new Act passed in 1850 raised the weekly hours to 60, and it was not until 1853 that the hours of all workers were settled at 60 per week by the extension of the normal day to children. During these six years the textile trades went from depression to expansion, and it is quite likely that the direct changes in piece-rates and earnings were due to changes in the condition of trade. In other words, the Acts were not fully effective until 1853,1 and our examination of their effects should be between 1846 and 1853-4. For this purpose we have not the necessary material, but a table of cotton wages from the Factory Inspector's Report for 1865 shows the movements of wages after the Act of 1850, as follows2:-

	1850.	1853.	1854.
Spinners, men	s. d. 20 - 20 - 14 - 12 - 8 9	s. d. 22 - 22 - 15 4 13 2 9 8 11 -	s. d. 20 - 20 - 14 - 12 - 8 9

Here we have direct evidence of recovery after 1850, and a sudden fall in 1854. These changes may have been due to changes in the list, for there was a 10 per cent. rise in the Blackburn weavers' list in 1853, which was taken off in 1854. At Stockport the spinners gained a 10 per cent. advance in 1853, and lost it in 1854.4 At Preston there was a disastrous strike in 1853 for a 10 per cent. advance, which had been conceded in many other places. It may be, therefore, that the above table only reflects the influence of these strikes, but if not, it shows that wages rose during the recovery of trade after 1850.

See supra, Chap. VI., pp. 107—111.
 H. C., 1866, Vol. XXIV.

³ Report on Standard Times Rates, ed. 317, 1900, p. 167.

⁴ Banks, "Cotton Trade in Preston for the past Sixty-seven Years," 1886.

In any case, there is no evidence of a fall in 1854 as compared with 1850. The Acts extended to Scotland, where no strike took place, and a table given by John Strang, of cotton operatives' wages at Glasgow, shows a rise in all branches between 1851 and 1856.

	1851.	1856.
Power-loom weavers Spinners Grinders Warpers Dressers Tenters Twisters	s. d. {7 3 8 9 21 - 8 - 12 - 30 - 9 -	s. d. 8 3 10 9 25s., 30s. 9 - 17 - 40 - 12 -

From this it seems certain that wages rose after the last Act of the series, as compared with their level during the time the industry was unsettled. If, therefore, the Act did reduce wages, the reduction lasted only for a short time, and the level obtained afterwards was higher than for many years before.

But did the Act of 1847 temporarily reduce wages?

Leonard Horner, the factory inspector, made direct inquiries of the operatives over the whole of the Lancashire district, with the object of finding what were the opinions of the operatives as to the Ten Hours Act, i.e., whether they would prefer a 10, 11, or 12 hours day, and he therefore inquired about wages. He wanted to know whether, supposing there had been a reduction, they preferred a 10 hours day with less wages, to the original day with the higher wages. His method was to select, indiscriminately, operatives in various mills he visited, and question them. But, although he selected indiscriminately the operatives he interrogated, "if any were not receiving less than they would do were they working 12 hours," he "did not carry the conversation further." Hence we have recorded only the replies of those whose wages were reduced. Horner's method was right if he had recorded all the replies, for, short of a complete wage census, samples taken at random will usually give the best approximation to the actual facts. The questions asked were, "What were they getting for 10 hours,

¹ Journ. Stat. Soc., 1860.

and what would they get, at the same rate, if they worked 12 hours?"1 The following are samples of the replies:-

	Getting for 10 Hours' Work.	Would get for 12 Hours' Work.		Getting for 10 Hours' Work.	Would get for 12 Hours' Work.
Roving frame tenters	s. d. 8 5 7 11 8 9 7 - 12 6 9 6	s. d. 10 - 9 8 10 0 8 - 15 - 11 -	Jack frame tenter Throstle frame ,, Bobbin ,, Card frame ,, Mule piecers	s. d. 8 8 7 4 9s. to 10s. 8 – 7 – 9 –	s. d. 10 6 9 - 12s. to 13s. 9 6 8 6 10 -

There seems no room to doubt that some of the operatives themselves believed that wages had fallen through the Ten Hours Act, but it is doubtful if, at any time, the reduction from this cause equalled 16 per cent., the amount of the legal reduction of hours. There were reductions in piece rates in 1847 generally amounting to 10 per cent. These were not due to the Factory Act, but to the trade depression, and were effective before the Act came into operation.2 To show how difficult it is to sift the evidence and decide whether or not the Act did reduce wages, the following actual replies to Horner's questions may be cited3:-

No. 231.	Weaver	"Is working 10 hours; earns 9s.; if working 12 hours would earn 10s. 6d."
,, 233.	,,	"Works 10 hours; earns 8s. 6d. to 9s.; if working 12 hours would earn 10s. 6d."
,, 176.	Single woman, 19, weaver	"Works 8 hours; earns 7s.; if working 12 hours, 10s."
,, 178.	Weavers' over-	"Working 8 hours; earns 20s. to

Working 8 hours; earns 20s. to 21s.; if working 12 hours, 30s. over-Is greatly injured by the short time of working."

This "short time of working" cannot have been due to the Act, but its existence makes the whole of the evidence doubtful for our purpose, and perhaps the best evidence is to be found in the following statement of the average earnings of the whole of the workers in certain mills:-

looker

¹ Factory Inspectors' Report, H. C., 1849, Vol. XXII., p. 144. (Italics added.)

² See supra, Chap. VI., pp, 97, 98.

³ Factory Inspectors' Report, H. C., 1849, XXII., pp. 157-206.

Cotton, Manchester.1

	Average Earnin Two I		
	(a.) Fine Yarns.	(b.)	
1844 1845	s. d. 10 4 ¹ / ₄ 10 10 ¹ / ₂	s. d.	Notes to (b).
1846	10 3 10 9 ³ / ₄	10 - 8 4 1 8 2	12 hours a day. 1) Only 4 days a week,
1848	10 3½ 9 10½	8 2 9 4	trade bad. Upon the half-year, 11 hours a day.

Here there is an undoubted fall after 1847, but it is not even equal to the 10 per cent. reduction of piece rates, let alone the 16 per cent. reduction in hours. This would lead to the belief that the Ten Hours Act caused a slight reduction of earnings, but that this reduction was only temporary. The following evidence respecting weavers' earnings substantiates this view.

In his report for 1850,² Leonard Horner again discusses the effects of the reduction of hours. Thirty-one weavers, working 65 looms, had earned:—

	1845. 69 Hours, 142 Picks per Minute.		1848-49. 58 Hours. 148 Picks. 10 per cent. Reduction.
7th June	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1848 { 4th November 11th 18th 25th 12th May 19th 23rd June 30th	£ s. d. 15 16 10\frac{1}{2} 15 10 4 15 15 10\frac{1}{2} 16 2 6\frac{1}{2} 16 15 10\frac{1}{2} 16 15 10\frac{1}{2} 16 12 11 17 - 10\frac{1}{2}
Total 8 weeks	145 9 6		130 8 4
		Allow for reduction (sic)	13 - 9½
			143 9 11
Average per week	- 11 8	Average per week	- 10 6

1 "Returns of Wages," p. 12.

² Report of Factory Inspectors, H. C., 1850, XXIII., p. 184.

Horner's comments on the figures are that if 69 hours gave £145, 58 should give £121; but, allowing for the reduction of 10 per cent. (which he does by adding 10 per cent. only to the second total), we get £22 more, and of this, £5 comes by the

increased speed and £17 by closer application.

These figures repay closer examination. If we take away the 10 per cent. reduction, the average for the eight weeks in 1845 is 10s. 6d., the same as in 1848—49, and there is no room for any reduction from the lessening of hours. The combined reductions are $\frac{1}{10} + \frac{11}{69}$, or 26 per cent., and the losses actually suffered, taking the average of the eight weeks of 1845 as our basis, are:—

	18	348.		1849.				
4th Nov.	11th Nov.	18th Nov.	25th Nov.	12th May.	19th May.	23rd June.	30th June.	
Per cent.	Per cent. 14.5	Per cent. 13'2	Per cent.	Per cent. 7.6	Per cent. 7.6	Per cent. 8.5	Per cent. 6'4	

The margin grows less in 1849 than in 1848, until it becomes not only less than the amount expected from the reduction of hours, but less than the 10 per cent. reduction in piece prices. At no time does it equal the expected amount, and only for eleven months is it more than 10 per cent. We may reasonably conclude, therefore, that for about the first twelve months there was a reduction in earnings due to the reduction in hours, and that the temporary loss was gradually made up. The reason has already been mentioned above, *i.e.*, the increased efficiency of machinery and workers. The machines were speeded up by $\frac{1}{24}$, so that it is a matter of simple arithmetic to calculate the value to the weaver of the closer application made possible by increased personal efficiency.

So far, we have only considered the evidence respecting the cotton industry, but the Act of 1847 applied to all textiles. In Somerset and Dorset the inspector (T. J. Howell) reported that "there has been in some few cases a reduction of wages, but this was by no means general in this part of my district (Crewkerne), and the opinion seemed to be that as trade revived wages would revive also; in fact, I was told that the

¹ E.g., 30th June, 1849. Reduction in hours and reduction in piece prices = 26 per cent. Rates of expected earnings 1845—49, 100:74. Ratio of actual earnings 100:93'6. Difference 19'6: due to speeding up 168 = 3'0; due to increased application 16'6.

scale of wages was already so low as to leave but little margin for reduction." In Scotland the inspector (Jas. Stuart) reported: "I have every reason to think that many of the operatives complain of the reduction of one-sixth part of their earnings, which has generally followed the deprivation of one-sixth part of their hours of work"; 2 but he did not "deem it prudent" nor "within his province" to examine the operatives on the point.

In the Yorkshire woollen industry wages may have fallen, but any such fall must have been temporary, for the accounts we have for the Huddersfield district show a rise both between 1839 and 1849, and between this latter year and 1859. The reduction of hours is stated to have been from $65\frac{1}{3}$ in 1839 to

60 in 1849. The figures are:—

Wages in Wool, Huddersfield.3

	1839.	1849.	1859.
Warpers F. Winders for power looms Y.G. Reelers G. Power-loom weavers F. Knotters and burlers F. Boys and Girls—	s. d. 7 - 5 - 6 6 8 8 7 -	s. d. 8 - 6 - 7 6 9 10 7 6	s. d. 10 - 8 6 8 6 8 6 12s., 15s. 9 -
Servers or feeders for— 1 scribbler 2 scribblers Billy piecers Mule Dressed cloth burlers W.	6 - 7 - 4 - 5 - 7 -	7 - 7 - 4 6 5 6 7 6	8 - 8 - 5 - 7 6 9 0
Hours	65 ½	60	60

Subsidiary information, supporting this statement of the course of woollen wages, is given in Sir E. Baines' "Yorkshire," where the earnings of power-loom weavers (women) at Leeds are given as:—

1835.	1848.	1857.	1870.
s.	s.	s.	s.
9	9	12	12

¹ H. C., 1849, Vol. XXII., p. 258.

² *Ibid.*, p. 259. ³ "Returns of Wages," p. 95.

In this case earnings may have been reduced for a time after 1848, but the recovery soon came, and a rise of 33 per cent. certainly justifies the assumption that the effects of the reduction of hours were not permanently injurious to the operatives.

Mr. Bowley's "conjectural" course of wages at Leeds and

the neighbourhood (male and female adults only)—

1835.	1845.	1857.	1860.
75	80	85	95

also indicates a progressive series of increases over the whole period. Material for intermediate years is necessary, however, for any more definite statement than that if the Act of 1847 and its immediate successors did reduce wages, such reduction was only temporary, not lasting more than a couple of years.

In this connection the observations of the factory inspectors

are of value. Horner, in 1851, reported :-

"The last year has afforded fresh proofs that the restrictions now regulating the labour of children, young persons, and women in factories, which have immensely improved their condition in many respects, have not been attended with the

injurious effects upon trade which were apprehended.

"In all the departments of the factory in which wages are paid by piecework—and these constitute, probably, not less than four-fifths of the whole, the proportion to fixed weekly wages being daily on the increase—it has been found that the quantity produced in 10½ hours falls little short of that formerly obtained from 12 hours. In some instances it is said to be equal. This is accounted for partly by the increased stimulus given to ingenuity to make the machines more perfect and capable of increased speed, but it arises far more from the workpeople, by improved health, by absence of the weariness and exhaustion which the long hours occasioned, and by their increased cheerfulness and activity, being able to work more steadily and diligently, and to economise time, intervals of rest while at their work being less necessary."²

¹ Journ. Stat. Soc. March, 1902, p. 117.

² Report of Factory Inspectors, 31st October, 1851, quoted by Rae, "Eight Hours for Work," pp. 23, 24.

A later and more matured judgment is equally decisive. Robert Baker, another inspector, told the Social Science Association in 1859, that "although the hours of work have been very much diminished, wages have increased, in some cases 40 per cent., and generally 12 per cent.," and that this reduction of hours and increase of wages had "not diminished any kind of textile production, and therefore it did not injure our national prosperity." Further evidence in support of this latter statement is found in Tooke's "History of Prices," where it is said that "during the years 1850—55 as many as 570 new mills (wool, cotton, flax, and silk), with an aggregate of 14,389 H.P., were built in the United Kingdom; that 226 of the old ones were extended by additions, with 5,977 H.P.; while only 177 mills, with 3,788 H.P., became unoccupied."

The next extension of the Factory Acts took place in 1860, when bleaching and dye works were first regulated. The limits of the working day were not so strictly defined as those of 1850 for textiles, and, provisions being made for overtime, it was not so rigidly applied. Nevertheless, a definite reduction of hours took place, and at Dundee we are able to trace its effects with

some reliance.

Wages in Bleaching, Dundee.3

	1855. 1858.		1859. 1860.		1861.	1863.	1866.	
Women Lads, 15—18 years Children, 13—15 years	s. d. 6 - 7s.6d.,9s. 4 6	s. d. 5 6 6 – 4 –	s. d. 6 - 7 6 4 6	s. d. 7 - 9 - 5 -	s. d. 6 - 9 - 4 6	s. d. 8 - 12 - 5 3	s. d. 7 6 9 - 6 -	

The result indicated by this table is an immediate fall of about 10 per cent., which was not only recovered in a couple of years, but was succeeded by an absolute advance. In this case we have means of seeing that something other than a change in the condition of trade caused this movement of wages. The "Returns of Wages" contain a large number of statements for other industries for 1860 and 1861, but this is

3 "Returns of Wages," pp. 86, 87.

¹ Quoted by Webb and Cox, "Eight Hours Day," p. 96, ² Vol. XI., p. 52.

nearly the only case in which a reduction is recorded. A decided increase took place in the linen and flax and jute industries in these years, and as the state of trade in the bleaching industry depends on these, and was not therefore depressed, we cannot but conclude that the reduction of hours through the extension of the Factory Acts temporarily reduced wages. Herein the experience of the cotton trade in 1848-49 is repeated.

The next extension came in the following year, and brought under the control of the law hosiery and lace, two industries which had taken much longer than the textiles to pass from the domestic to the factory system, and in which long hours had hitherto prevailed. The "Returns of Wages" do not give any information for years prior to 1861, and we cannot compare wages before and after the Act, as in bleaching. For hosiery we have the following 1:-

	1861.	1866.		1861.	1866.
Looped fabrics— Hose seamers W. Sewing machine handsW. MendersW. Children	} 9 - 9 -	s. d. { 4 6 7 - 12 - 10 - 5 -	Fancy hosiery and underclothing— Counter hands W. Menders	s. d. 6 - 14 - 8 3	s. d. { 9 - 10 - 12 0 8s., 12s.

This evidence points to a considerable rise in the five years, and Felkin says that conditions in bobbin-net manufacture in 1865 might be taken as representative of 1862.2 Hence, in these industries, any fall caused by the Factory Act must have been early recovered; but it is doubtful if there was any fall.

In 1864 an extension was brought about through the evidence given to the Commission on the Employment of Children in 1862-63, and certain non-textile industries were for the first time regulated. We have no evidence relating to the manufacture of percussion caps or cartridges, fustian-cutting or paper-staining, but such as relates to the manufacture of earthenware and pottery is rather conflicting. In Staffordshire, for instance, the "Returns" show an increase in some

^{3 &}quot;Returns of Wages," pp. 232, 233.

 [&]quot;Returns of Wages," pp. 129, 130.
 "History of Machine Wrought Hosiery and Lace," 1867, p. 398.

cases and a decrease in others, but the period 1860—61 to 1866 is too long to allow us to definitely ascribe either change to the Factory Act.

Wages in Pottery, Staffordshire.

	1860—61.	1866.
Earthenware { transferers W. enamellers W. burnishers W. Porcelain { enamellers W. burnishers W. burnishers W.	Per day. s. d. 1 9 1 8 1 1 1 8 1 6	Per day. s. d. 1 6 1 8 1 8 1 7 1 8

In Worcester, also, the only female adults mentioned suffered a reduction, while the girls received so large an increase that the statement for 1866 is probably a misprint.

Wages in Pottery, Worcester.

	1863.	1866.	1867—68.			
Painters \ \ \ W. \ G. \ Enamellers \ W. \ Burnishers \ W.	s. d. s. d. 12 - 21 - 2 6 5 0	s. d. 10s. 6d., 12s. 5s., 6s. 12 – 10 6	s. d. s. d. 2 - 5 - 10 - 14 - 8 - 12 -			
Hours	62	50	50			

The reduction of hours at this place is much more than was necessitated by the Act, and 50 hours may mean 60. It should be noticed that the wages of girls fell in 1867—68 to less than the amount stated for 1863; but this may be ascribed to the depressed state of trade, as the statements for enamellers and burnishers would indicate. In Newcastle² women's wages are given as 5s. to 9s. in 1860, and 10s. in 1866. Such conflicting

^{1 &}quot;Returns of Wages," p. 237.

² Ibid., pp. 240, 241.

evidence, therefore, is not sufficient for us to arrive at any conclusion, but in the report of Robert Baker (factory inspector) there is a definite statement to the effect that in 1866 the average wages of men were 24s. 10d., of women, 9s. 1½d., and of children, 4s. 4d., and that a rise had taken place since the Factory Act of 1864. There is, however, nothing to indicate whether the statement refers to the whole district or only a portion. In the latter case, Staffordshire would be intended, as this district came under his control. On the whole, therefore, the evidence leads to the conclusion that wages were affected more by other influences than by the Factory Act, but that the latter, if it affected wages at all, caused a rise.

As to the effects of the Factory Acts Extension Act of 1867 we again have no evidence, and this is regrettable, because of the large number of industries which then first came under regulation. It was passed during a period of trade depression extending over two or three years, and was then succeeded by a rapid expansion, which lasted until after the Franco-German war. All trades seem to have shared in the prosperity, and between 1868 and 1874 considerable increases are recorded in each industry for which index numbers of wages have been compiled. Thus, even if we had records for 1865-66 and 1868-69, we should have great difficulty in deciding how far changes in this period were due to the Factory Act, and how far to the conditions of trade. We may, therefore, pass to the Act of 1874, which reduced the hours in the textile trades from 60 to 56½ per week, and in January, 1876, raised the minimum age for full timers to 14 years, unless "evidence of proficiency" was produced.

In considering the effects of this Act, we are fortunate in the amount of material at our disposal. The state of trade, however, must be taken into consideration, and although in each industry there was an expansion from about 1868 to the early and middle "'seventies," and a contraction afterwards, the latter change came in different industries in different years. For instance, the maximum in the Belfast linen trade wa reached in 1872, and in wool, apparently, in the same year. In the jute and cotton trades the maximum was reached in 1878.

Taking first the cotton trade, we have in the following table figures for Manchester² which show an increase after 1874, and illustrate the effect of the depression which commenced about 1877.

¹ Report of R. Baker, H. C., 1866, Vol. XXIV.

² "Returns of Wages," pp. 49-51. See supra, p. 271.

Wages in the Cotton Trade, Manchester.

	1874.	1877.	1880.
Drawing frame tenters W. Bobbin and fly ,, { W. G. Cop reelers W. Doublers W. Cardminders W. Gassers W.	12s. 6d. 11s., 16s., 6s. 10s., 11s. 6d. 10s., 15s. 8s., 14s. 12s.	17s.6d., 18s.7d. 16s.6d., 18s. — 12s. 12s. —	14s., 15s. 4d. 7s. 3d. 12s. 13s.

This table affords no means of comparison with an earlier year than 1874, but the hours were not reduced until after the time to which the 1874 figures relate. Even in 1880, when the lowest point of the subsequent depression had been reached, the earnings are above those of 1874, so that we may be assured that the Factory Act did not reduce

earnings.

The effect of the Act in the jute trade was only a reduction of 1½ hours per week, a voluntary reduction from 60 to 58 hours having taken place in 1872. In the table of increases and decreases between 1871 and 1892 it is stated that spinners' wages were reduced 5d. per week by the operation of the new Factory Act, and we must therefore recognise that the wages of day-workers were lowered for this reason. Our index numbers for jute show that an immense rise took place between 1871 and 1874, and that by 1877 this increase had been reduced by nearly 50 per cent.

During the first period, hours were reduced and trade was expanding; during the second, hours were again reduced and trade was depressed. The maximum of prosperity was reached in 1873. The factory inspectors, in their reports during these years, speak of the depression of trade reducing wages, but do not mention that any reduction took place in consequence of the new Act. This would lead to the conclusion that, even if the spinners' wages were reduced through the new Act, the depression of trade was a more patent cause for the reduction

of weavers' earnings.

In the Dundee linen and flax industry the change between 1874 and 1877 is not so pronounced as in the jute industry. Taking fourteen sets of wage-earners, in six cases the average remained unchanged, in four cases an increase is indicated, and in the same number of cases a fall. The figures are shown in the following table 1:—

^{1 &}quot;Returns of Wages," pp. 73, 74.

Wages in the Linen and Flax Industry, Dundee.

	1871.			1874.				18	77.	
(W	s. 6	d.	s. 10	d.	s.	d. 6	s.	đ.	<i>\$</i> .	d.
Preparers for spinning Lads	5 8	-	8		7	6	12	6	7	6
Spinners(W		-	14 6	_	10	6	13	6	13	6
Twisters`W	3 8	6	12	_	10	6	11	_	1	?
Reelers(W	8		14	***	10	-	14	~	13	6
Hacklers	6	6	5 10	6	10	6	ı.	6	7	6
(Lads	4		7	9	8		II	-	8	_
Winders $\{W, \dots \}$	7	_	15 5	_		12s.	6d. s.		12 6	6
WarpersLads	9	-	7	_			?s. s.		12	-
Weavers	8	-	16	_			js.		15	-

These changes after 1874 are such as seem unconnected with any general cause, and indicate, if anything, a state of flux. No argument can be based upon them, and in this they are not unlike those for linen and flax at Belfast.¹

	1871.	1874.	1877.
Preparers for spinning W. Spinners W. Reelers W. Winders W. Weavers W. Warpers W.	s. d. s. d. 6 - 8 - 6 6 8 - 6 - 7 6 6 - 9 - 9 - 12 - 9 6 10 6	s. d. 6s., 7s. 8 - 8 - 7 6	s. d. 8 - 7 9 9 - 11 6
Hours	9 6 10 6	60	56½

The preponderance of changes after 1874 in this case points to an average rise. The slight decrease in the case of reelers may be unreliable, in view of the great rise in the case of the same workers from 1871 to 1874. From these tables we are only able to draw the negative inference that the Act did not affect wages in this industry.

We now come to the woollen and worsted manufactures, and as an indication of the changes of wages during the period we are considering may cite Mr. Bowley's index numbers of changes in average wages (of all employed) as follows:—

^{1 &}quot;Returns of Wages," pp. 77, 78.

Index-numbers of Wages in Wool and Worsted.

		1870.	1874.	1877.	1880.
Bradford	Heavy woollen district	105	115	115	115

These numbers are fairly consistent with each other, and point to an increase from 1870 to 1874, and a fall commencing generally in 1874-77. In his report to the British Association Committee on Women's Labour, Mr. Bowley says: "As regards wages, it must be admitted that it is impossible to determine whether the reduction of hours in 1874 had direct effect on wages or not. So many important changes and events took place about that time that the effect of the diminution of the working week one-twentieth must be masked by other changes. General wage statistics are not sufficiently accurate to enable us to identify a particular change of 6d. per week. No one I spoke with recollects any specific change in weekly, hourly, or piece rates. Two combers state that there was no change in wages in 1874, but that there was a gradual fall after that date. Manufacturers near Bradford, at Batley, and in Leeds agree that the rates were unaltered; thus all on weekly wages obtained the same after as before the change in hours, but those on piece rates (that is, all the weavers) earned less, except in so far as they could make up by increased hourly output. Whether they made up the difference or not is a question on which various opinions are held, but there are no statistics to back them."1

Here we have the negative evidence that no one remembers a reduction due to the Factory Act. With respect to the question of piece-workers' earnings, we have the following evidence 2:—

	1874.	1877.
Women, Dewsbury ,, Leeds Men, Leeds ,, Huddersfield ,, Pattern weavers, Huddersfield ,, Bradford Women	s. d. 16 - 14 - 20 - 24 - 25 - 20s., 21s. 16s., 18s.	s. d. 16 - 14 - ³ 20 - ³ 25s., 35s. 25s., 30s. 18s., 22s. 14s., 17s.

Mr. Bowley's Report. Page 9 of the Report as presented to Section F.
 Compiled from Mr. Bowley's paper. Journ. Stat. Soc., March, 1902.

3 1876.

The only evidence of a fall in these places is at Bradford. In the other centres there was practically no change, so that it may have been that in the case of worsted weavers they did not increase their average output to keep up their previous earnings. In any case the effects of the Act on woollen

operatives do not appear to have been serious.

From 1874 until 1901 the legal hours of employment remained the same, and the Act of that year is too recent to permit any conclusion to be drawn as to its effects on wages. We have looked for the effects of several Acts on the wages of the workers affected, but these effects have not been uniform or consistent. After the Acts of 1833 and 1844 a rise took place, but after the Ten Hours Act there was a temporary reduction, which was soon recovered. When the industries affected became settled again after the trade depression there was a general increase. The extension to bleaching appears to have depressed wages only to subsequently increase them to a higher level than before; that to hosiery and lace appears not to have affected wages; that to earthenware is said to have caused an increase. The Act of 1874 apparently did not affect wages in the cotton and linen industries; reduced the wages of certain classes (time-workers), but did not, apparently, affect others (piece-workers) in the jute industry; and its effect on the woollen and worsted operatives is not clear. Generally speaking, therefore, the immediate effects of factory legislation have not been hurtful to the economic interest of the workers. Over the whole period passed under review there have been, with fluctuations due to the changing conditions of industry, marked advances of wages in each industry in which women are employed under conditions regulated by the Factory Acts, and this has been ascribed by competent observers to the increased efficiency of the operative and the increased intensity of the work.

Ellison, in his "Cotton Trade of Great Britain," gives a table showing the numbers of operatives, spindles, and looms employed, the output of yarn and piece goods, wages, and cost of production per pound, at successive periods between 1829 and 1832, to which F. Merttens has added figures for 1891—3.¹ The following table shows the progress of this increased efficiency, so far as it relates to the cotton trade:—

^{1 &}quot;Hours and Cost of Labour in the Cotton Industry at Home and Abroad," paper read by F. Merttens to the Manchester Statistical Society, 1893—4.

Mills.
Spinning
Trade:
Cotton
to the
relating
Statistics

	~								
		Labour Cost Yarn Exported.	,	lbs.	63,300	145,190	189,130	236,360	228,362
		Labour Cost per lb.		d.	4.5	2.3	2.1	6.I	1.6
		Yarn Spun. (000's omitted.)			216,500	523,300	910,000	1,324,900	1,465,600
0		Per Operative.	Per Hour.	lbs.	.43I	.883	941.I	628.1	2.276
7-	Production.	Per Ope	Per Year.	lbs.	1,546	2,754	3,671	5,520	6,662
	PR	Pro Per Spindle per Year.			21.6	26.8	30.0	31.5	32.4
,		Average Wages per Week.		s. d.	9 oı	- II	12 6	- 7I	- 61
		Hours per Week.			- [69	100	9	563	563
		Operatives per 1,000 Spindles.			14.0	9.74	91.8	2.21	4.86
	Operatives in Cotton Mills.			140,000	000,061	248,000	240,000	220,000	
	Spindles. (000's omitted.)				10,000	19,500	30,400	42,000	45,270
		Years.			1829-31	1844-46	1859-61	1880-82	1891–93

Vewing Mitts.	Goods Exported. (000's omitted.)			lbs.	82,600	228,500	536,000	888,000	903,640
	Labour Cost per lb.			d.	00.6	3.200	2.60	2.30	2.50
	Goods Produced. (000's omitted.)			lbs.	143,200	348,110	650,870	993,540	1,231,300
	Production,	Per Operative.	Per Hour.	lbs.	24I.	685.	1.027	1.374	1.352
			Per Year.	lbs.	521	1,681	3,206	4,039	3,972
		Per Loom per Year,		lbs.	470	1,234	1,627	1,806	1,866
	Average Wages per Week.			s. d.	0 0	10 -	or ii	15 -	9 91
	Hours per Week.			(60	100	09	561	56½
	Operatives in Weaving Mills.				50,000	150,000	203,000	246,000	310,000
	Looms.			ť	Fower 80,000 Hand 225,000	Power 225,000 Hand 60,000	400,000	550,000	000'099
	Years.				1829-31	1844-46	1859-61	1880-82	1891-93

72 hours or longer seem to have been the usual These hours do not appear to have been those actually worked.

Here we have a complete view of the matter. In the spinning mills the number of operatives to each 1,000 spindles has decreased from 14.0 to 4.86, while the output per spindle has increased from 21.6 lbs. to 32.4 lbs., the output per operative from 1,546 lbs. to 6,662 lbs., and the labour cost per lb. of yarn spun has fallen from 4.2 pence to 1.6 pence. Considered with relation to the hours of labour, even as stated by this author,1 the hourly output per operative is even more remarkable, having increased from '431 lb. to 2'267 lbs., or roughly by 400 per cent. In the weaving mills a similar condition is shown. The earlier records are not so valuable for our purpose as the spinning records, because the comparatively low output of the hand-loom weaver is included with that of the powerloom weaver, thus tending to exaggerate the movement towards increased efficiency, but commencing with 1844-46, when the hand-loom weavers were a much smaller proportion, and were doing a more or less specialised class of work, we find an increase in the output per loom from 1,234 lbs. to 1,866 lbs., in the output per operative per year from 1,681 lbs. to 3,972 lbs., and a reduction of the labour cost per lb. from 3.5 pence to 2.59 pence. Again, also, the increase in the hourly output per operative is largest, being from .539 lbs. to 1.352 lbs., or, roughly, 150 per cent. These larger increases represent the rise in the efficiency of the operative and the machinery combined. It is difficult to say how much is due to the operative and how much to the improved machinery, but it is certain that all is not due to the latter cause.

In the jute industry there is also evidence of this progressive increase in the efficiency of the workers. Between 1873 and 1896 workers in the weaving departments suffered reductions in list prices equal to 25 per cent., but "there would seem to be no decline "2 in earnings, and this "favourable position of the weavers must be attributed to increased efficiency of the workers and improvements in machinery." 3 "It was because the weavers' average wage had not in fact fallen to the same extent as that of the spinners, that they suffered a reduction in 1884, and received no advance in 1890." 4

In the woollen and worsted industries the combined results show that both spindles and looms have consistently increased in greater proportion than the operatives. There were 36 per cent. more spindles, and 59 per cent. more looms per operative in 1890 than in 1850. From 1854 to 1890 the exports of

¹ See note to table.

² Miss Collet's Report, C.—8794, p. 30.

³ Ibid.

⁴ Ibid., p. 28-29.

					,	,	7		,	00			
Sex.	1835.	1838.	1847.	1850.	1856.	1862.	1867.	1870.	1874.	1878.	1885.	1890.	1895.
M, and F, under 13 years	28,771 27,251 58,053 106,059	12,327 41,046 64,547 141,184	17,537 33,814 78,783 146,894	14,993 37,059 94,960 183,912	24,648 38,941 103,882 211,742	39,788 41,207 119,263 251,306	41,674 34,324 104,461 220,605	43,281 38,209 117,046 251,551	66,900 38,557 115,391 258,667	61,923 34,730 122,079 264,171	49,993 40,205 132,269 281,603	48,133 43,561 141,925 295,176	31,510 42,355 148,724 316,294
Totals	220,134	259,104	277,028	330,924	379,213	451,568	401,064	450,087	479,515	482,903	504,069	528,795	538,883
Number of factories	i	I	1	1,932	2,210	2,887	2,549	2,483	2,655	2,674	2,635	2,538	1
				Woolle	Woollen Factories	ries.							
M. and F. under 13 years	9,451 8,042 18,818 19,150	6,203 11,018 18,754 18,833	7,274 10,624 23,135 21,654	7,094 11,884 28,655 26,810	6,703 11,134 30,579 30,675	5,969 II,213 35,179 34,622	6,767 13,978 45,098 61,338	5,635 13,770 46,048 59,677	8,266 13,690 48,050 64,599	9,410 11,258 47,828 65,848	5,232 12,462 52,000 69,622	4,934 13,188 54,115 76,492	3,339 11,968 58,652 80,051
Totals	55,461	54,808	62,687	74,443	160'62	86,983	127,181	125,130	134,605	134,344	139,316	148,729	154,010
Number of factories	1	ł	1	1,497	1,505	1,679	1,658	1,829	1,800	1,732	816,1	1,793	1
				Worsted	d Factories.	ries.							
M. and F. under 13 years	3,959 2,081 1,704 8,136	4,534 3,753 3,020 20,321	7,337 4,452 7,228 32,780	9,956 7,695 15,185 46,901	11,228 7,116 18,079 51,371	13,178 6,614 18,619 47,652	26,069 9,641 24,712 71,451	18,306 9,481 24,950 56,820	29,828 II,259 31,622 69,388	21,540 9,944 29,657 69,784	18,312 11,777 34,864 73,277	17,872 12,614 38,386 79,452	9,894 10,964 28,840 69,781
Totals	15,880	31,628	51,797	79,737	87,794	86,063	134,896	109,557	142,097	130,925	138,230	148,324	119,479
Number of factories	1	I	1	50I	525	532	703	630	692	693	725	753	1
	-				Commence of the last of the la	-			-				

162

991

66,113 188

64,475

61,749

56,342 144

60,316 149

55,039 154

57,050

33,525 100

28,753

21,121 S

17,088 ٨.

6,017 40

3,681 25

Totals

Number of factories.....

143

110

Numbers of Persons Employed in Flax and Jute Factorics in Scotland, at certain Ages.

[From Miss C. E. Collet's Report. C-8794.]

					AI	I ENDI	Λ B	٠.		
	1895.	3,659 5,044 15,372 50,546	74,621	261		130 483 2,164 5,121	7,898	81		4,682 4,748 14,473 42,210
	1890.	4,861 5,494 14,806 48,946	74,107	239		327 510 2,193 5,856	8,886	59		5,856 4,791 13,181 40,647
	1883.	7,248 4,980 14,338 48,789	75,355	257		418 604 2,766 7,214	11,002	2,		5,382 4,370 11,911 40,086
	1878.	5,670 4,686 II,948 45,573	67,877	254		1,265 808 3,442 9,473	14,988	IOI		3,974 4,588 10,871 36,909
	1874.	6,341 6,415 13,232 50,721	76,709	243		2,089 1,380 4,632 14,226	22,327	141		3,555 5,960 10,983 39,818
1.1.	1870.	2,544 5,535 10,926 45,823	64,828	239		1,390 1,744 4,796 11,886	19,816	155		1,601 5,560 11,307 36,571
'a a madan ann	1868.	1,881 4,249 9,006 37,011	52,147	165	25.	1,947 1,730 4,371 13,811	21,859	128		1,374 5,812 10,627 39,237
	1862.*	955 3,446 6,799 27,817	39,017	190	England and Wales	1,997 1,383 3,651 13,277	20,308	136	Ireland.	668 3,761 5,966 23,130
	1856.	3,174 5,039 23,083	31,722	168	igland a	1,267 1,932 3,551 13,037	19,787	139		3,844 5,053 19,743
	1850.	279 2,949 4,773 20,311	28,312	189		1,264 2,039 3,357 12,341	19,001	135	In Flax.	38 3,024 3,868 14,191
	1847.	405 1,973 3,465 15,487	21,330	٥.	In Flax.	1,588 2,385 3,837 12,035	19,845	~-		36 2,458 3,128 11,466
,	1839.	243 2,277 2,356 13,021	768,71	183		1,420 2,279 2,287 IO,587	16,573	178		1,397 1,366 6,150
	1835.	1,806 1,129 1.550 8,924	13,409	170		2,951 1,770 2,341 7,571	14,633	401		340 399 463 2,479
	F.L.	M. and F. under 13 years M. 13—18 years M. over 18 F. n 13	Totals	Number of factories		M. and F. under 13 years M. 13—16 years M. over 18 F. 13	Totals	Number of factories		M. and F. under 13 years
	r.L.	•								Λ

* Jute specifically mentioned for the first time. In many cases, both before and after 1862, jute factories were returned under flax.

woollen and worsted yarn per spindle working increased by over 30 per cent., and the amount of wool consumed at home has nearly doubled per head of the population. This points to an increased output per unit of machinery as well as an increase of machinery per operative, and suggests a rise in the standard of personal efficiency. If we cannot show this as clearly as in the case of the cotton trade, there seems no room to doubt either its reality, or that it finds its incentive in the reduced hours of working. We have here dealt only with the textile industries, because these are the only ones that admit of statistical treatment; but investigation in other trades reveals the same fact—namely, that comparatively short hours tend to produce and maintain a high standard of efficiency.

An important aspect of factory legislation is its effects on the numbers of protected and unprotected workers employed. The argument most frequently brought forward against special regulations for women's labour is their alleged tendency for protected workers to be superseded by men. The numbers employed in certain industries from 1835 to 1895 are shown in

the tables on pp. 304 and 305.

What has actually taken place with regard to changes in the proportions of different classes of persons employed in the above industries may be seen in the following table:—

Proportions of Children, Young Persons, Women and Men, Employed in Textile Industries, 1835-95.

	'35•	'39•	'47•	'50.	'56.	'62.	'68.	'70 .	'74•	'78.	'85.	'90.	'95-
Cotton. M. and F. under 13 M. 13—18 M. over 18 F. ,, 13	P. ct. 13'1 12'4 26'4 48'1	P. ct.	P. ct. 6'3 12'2 28'4 53'1	P. ct. 4'5 11'2 28'8 55'6	P. ct. 6.5 10.2 27.4 55.9	P. ct. 8·8 9·1 26·4 55·7	P. ct. 10'3 8'5 26'1 55'1	P. ct. 9.6 8.5 26.0 55.9	P. ct. 13'9 8'3 24'1 53'7	P. ct. 12.8 7.2 25.1 54.9	P. ct. 9.9 8.0 26.1 56.0	P. ct. 9'1 8'2 26'8 55'9	P. ct. 5'8 7'8 27'6 58'8
Wool. M. and F. under 13 M. 13—18 M. over 18 F. ,, 13	17.0 14.2 33.8 34.6	=	11.2 17.0 37.0 34.2	9.2 15.8 38.6 36.1	8°5 14°1 38°6 38°8	6°9 12°9 40°4 39°8	5°3 11°0 35°5 48°2	4°5 11°1 36°8 47°6	6.1 10,5 32,6 48,1	7°0 8°4 35°7 48°9	3.8 8.9 37.3 50.0	3°3 8°8 36°4 51°5	2.5 7.4 38 I 52.0
Worsted. M. and F. under 13 M. 13—18 M. over 18 F. ,, 13	24°9 13°1 10°7 51°3	=	14'1 8'6 14'0 63'3	12.2 9.6 19.0 58.9	12.8 8.1 20.6 58.2	15°2 7°7 21°6 55°5	 	16.7 8.6 22.9 51.8	21°1 7°9 22°2 48°3	16°4 7°6 22°7 58°3	13.5 8.5 25.5 23.1	12'0 8'5 25'9 53'6	8·2 9·1 24·2 58·5

^{1 &}quot;Statistics of Bradford and the Woollen and Worsted Trade," by Fred.

Hooper, Bradford, 1901.

² See Report on Women's Labour, already quoted, especially Appendix III., Birmingham.

Proportions of Children, Young Persons, Women and Men, Employed in Textile Industries, 1835-95.—continued.

			1	1			1						
	'35∙	'39•	'47-	'50.	'56.	'62.	'68.	'70.	'74·	'78.	'8 ₅ .	'90.	'95•
Flax and Jute.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
Scotland. M. and F. under 13 M. 13—18 M. over 18 F. ,, 13	13.5 8.4 11.5 66.6	1°4 12°7 13 1 72°8	1'9 9'3 16'3 72'5	1.0 10.4 10.4	1'3 10'0 15'9 72'8	2*4 8:8 17*4 71*4	3.6 8.3 17.3 70.8	3'9 8'5 16'9	8'3 8'4 17'2 66'1	8·3 6·9 17·6 67·2	9.6 6.6 19.0 64.8	6°5 7°4 20°0 66°1	4°9 6°7 20°6 67°8
Flax. England and Wales, and Ireland. M. and F. under 13 M. 13—18. M. over 18 F. ,, 13	17.9 11.8 15.4 54.9	5'9 14'3 14'3 65'5	4'4 13'1 18'8 63'7	3°2 12°6 18°0 66°2	2.8 11.9 17.7 67.6	4°9 9°5 17°8 67°7	4°2 9°5 19°0 67°3	4'0 9'7 21'5 64'8	6·8 8·9 18·9 65:4	7°3 7°6 20°1 65 0	8°0 6'9 20°2 64°9	8·4 7·2 20·0 63·5	6.2 7.1 22.2 63.9

Here we see the general character of the changes in the personnel of the chief textile industries. Over the whole period there has been in all cases a reduction of the percentage under thirteen years of age. This change is probably due to the successive raising of the minimum age at which a child may enter a factory. The proportion of male "young persons" has also decreased in most industries, though in the worsted industry this change has not taken place, and in the flax and jute industries of Scotland it is not very marked. The proportion of women employed has increased in cotton, wool, and flax; in worsted men have increased, while the proportion of women has decreased; in the Scottish flax and jute industries the proportion of women increased at first, but, decreasing until recent years, shows a tendency to again increase; except in cotton and wool, men generally show a tendency to increase.

The combined effects of all these changes may be roughly seen in the following approximate analysis of the employment in all textiles:—

Sex and Age.	1835.	'39•	'50.	'56.	'70.	'74•	'78.	'85.	'90.	'95•
M. and F. under 13.	Per ct. 13 13 25 49	Per ct. 6 16 23 55	Per ct. 6 11 27 56	Per ct. 6 11 26 57	Per ct. 9 9 26 56	Per ct. 13 8 25 54	Per ct. 11 7 26 56	Per ct. 9 8 27 56	Per ct. 8 8 28 56	Per ct. 5 8 28 59

Of course, the preponderance of cotton operatives has a marked effect on these figures, and they should be considered in

conjunction with those given in the previous tables and with the numbers employed as shown in the tables on pp. 304 and 305. They lead to some general conclusions, however, noticeably, that the percentage of children employed diminished after 1835 until the "sixties," when the expansion in the textile trades brought about a marked change. The increase continued for only a few years, and though the small proportion of 1850 has not yet been reached, a considerable decline has taken place. Males between 13 and 18 years have declined almost consistently, their places apparently being taken by females over 13 years. This is only the substitution of one class of protected workers for another, and cannot be due to any movement to evade the Factory Regulations. It may be, and probably is, due to the increased efficiency of the labour of female young persons and women, and in so far as this increased efficiency may be ascribed to Factory Acts, it is in the nature of an indirect effect. Women's labour was not regulated until 1844, so any change in the relative employment of men and women before that date is not traceable to the Acts, and since then the percentage of men employed has varied little. On the whole there seems no evidence of a movement in favour of the substitution of unprotected for protected workers, and the chief result of the changes has been a substitution of the protected adult and young person for the similarly protected child. In the interests of coming generations, this seems a most satisfactory and desirable direction in which to move.

We may now shortly summarise what we have seen. It is not certain that there is always a direct connection between factory legislation and women's wages, but as a rule the sequel of each limitation of the hours of labour has been a rise of wages, though for a while they may have fallen a little. This generally arises from an increase in the efficiency of labour, which maintains or increases the former output in the lessened hours. In the only industries for which statistics are available there has been no substitution of protected for unprotected persons. The successive raising of the minimum age at which children may enter a factory has lessened the proportion of children under 13 years employed, thereby giving employment for an increased proportion of women and female young persons. All these effects have been for the general good, - women have shared in the progress of the past sixty years, and their wages have risen with men's, but at a faster rate and more consistently.

Note.—The Author desires to acknowledge the kindness of the Council of the Royal Statistical Society in permitting him to reprint tables and other matter which have already appeared in the Society's Journal.—G.H.W.

III.

A BIBLIOGRAPHY OF WOMEN'S WAGES.

BIBLIOGRAPHIES.

1898. Bowley and Hopkinson. A Bibliography of Wage Statistics. By A. L. Bowley and Miss A. Hopkinson. *Economic Review*, 1898.

This bibliography is so comprehensive that every student of wages history must be indebted to it. Comparatively few other sources of data have been discovered since its publication, and nearly every book mentioned in the following list is contained in it. It is only fair to the authors, therefore, that the present writer should acknowledge his indebtedness to their work.

1900. Bowley. Wages in the United Kingdom. By A. L. Bowley. Cambridge, 1900.

PARLIAMENTARY PAPERS.

Many of the Commissions and Select Committees, the Reports of which are mentioned in the Bibliography of Factory Legislation, have taken in evidence statements of wages and hours of labour, usually only incidentally, and arising indirectly out of the subject of inquiry. Some Commissions, however, have caused exhaustive inquiries to be made into the earnings of the workpeople engaged in the industry with which they have been concerned, and these form a useful source of information. But, for the present purpose, even these have their limitations. Men's wages have usually been the main subject of inquiry, they being the chief wage-earners, and women are, as a rule, only mentioned when employed with men, e.g., cotton, wool, and the textiles generally. Women's wages are, comparatively, a new subject of inquiry, and though in future years it may be possible to trace their history in many branches of employment, at present we are confined to a few in which men as well as women are employed. The following list indicates the chief Parliamentary Papers from which women's wages may be obtained :-

1831-2. H.C. 1831-2. XV. Labour of Children.

1833. H.C. 1833. VI. Manufactures, Commerce, and Shipping.

1833. H.C. 1833. XX. Employment of Children.

- 1839-41. H.C. 1839. XLII. 1840. XXIII. 1840. XXIV. 1841. X. Hand-loom Weavers.
- 1841. H.C. 1841. VII. Select Committee on Machinery.
- 1842. H.C. 1842. XXXV. Assistant Poor Law Commissioners. Stockport.
- 1854-5. H.C. 1854-5. XIV. Stoppages of Wages in Hosiery.
- 1863. H.C. 1863. XVIII. Employment of Children and Young Persons.
- 1864. H.C. 1864. XXII. Employment of Children and Young Persons.
- 1886. H.C. 1886. XXI. C. 4715. Second Report of the Commission on Trade Depression. Part I.
- H.C. 1886. XXII. C. 4715—1. Second Report of the Commission on Trade Depression. Part II.
- 1887. H.C. 1887. LXXXIX. C. 5172. Returns of Wages published between 1830 and 1886.
- 1889. H.C. 1890. LXX. C. 5809. Wage Census; Report. Principal Textiles.
- 1879. H.C. 1890. LXVIII. C. 6161. Wage Census; Report. Minor Textiles.
- 1898. H.C. 1898. LXXXIII. Pt. II. C. 6889. Wage Census; Report. General.
- 1893 and onwards. Annual Reports of the Labour Department on Changes in Wages and Hours of Labour;
- 1894. H.C. 1894. LXXI. Pt. II. C. 7567.
- 1895. H.C. 1896. LXXX. Pt. I. C. 8075.
- 1896. H.C. 1897. LXXXIII. C. 8374.
- 1897. H.C. 1897. LXXXIII. C. 8444.
- 1898. H.C. 1898. LXXXVIII. C. 8975.
- 1899. H.C. 1899. XCI. C. 9434.
- 1900. Cd. 309.
- 1893 and onwards. Labour Gazette, the Monthly Organ of the Labour Department.

- 1894. C. 7403. Report on Strikes and Lockouts of 1892. Contains statement of weavers' wages in various parts of Lancashire at p. 252.
- 1893-4. H.C. 1893-4. XXXVII. C. 6894. 1894. XXIII. Labour Commission. Reports by the Lady Commissioners on the Employment of Women.
- 1894. H.C. 1894. XXXV. C. 7421-1. Labour Commission. Final Report, Pt. II.
- H.C. 1894. LXXI. Pt. II. C. 7564. Report of the Labour Department on Statistics of the Employment of Women and Girls.
- 1898. H.C. 1898. LXXXVIII. C. 8794. Report by Miss C. E. Collet to the Labour Department on Changes in the Employment of Women and Girls in Industrial Centres. I. Linen and Flax.
- 1899. H.C. 1899. XCII. C. 9346. Report by Miss C. E. Collet to the Labour Department on the Wages of Domestic Servants.

REPORTS OF INSPECTORS OF FACTORIES.

Most of the Reports of the Factory Inspectors contain statements of wages, usually taken from the wages books of the factories visited by them. Many are not only contemporary but retrospective, and these being compiled by one person on a uniform principle, are of especial value. The following contain the most important of these:—

- 1842. H.C. 1842. XXII. Cotton, 1836-41, and some earlier figures.
- 1849. H.C. 1849. XXII. Effects of the Ten Hours Act.
- 1850. H.C. 1850. XXIII. Effects of "Speeding up."
- 1866. H.C. 1866. XXIV. Cotton, 1850-65.
- 1868-9. H.C. 1868-9. XXIV. Cotton, 1860-68 and Misc.
- 1871. H.C. 1871. XIV. Cotton, 1848-71, and Misc.
- 1883. H.C. 1884. XVIII. Cotton in Scotland, 1850-83, and changes in Jute, 1870-83.
- 1888. H.C. 1888. XXVI. Women in London, 1887.

GENERAL LITERATURE.

Even more than in the case of Parliamentary Papers, the mention of women's wages in the general literature of wage statistics is usually only incidental. In the following list, therefore, only those publications are mentioned which contain either important statements of wages, or throw important light on the relation of women's wages to those of men. Those marked with an * are specially important.

1768.* Young. Northern Tour. By Arthur Young. London, 1768.

Contemporary statements in many industries.

- 1791-9.* The Statistical Accounts of the Counties of Scotland. 21 vols. Edinburgh, 1791-9. 287. d. l.
- 1797.* Eden. The State of the Poor. By Sir F. M. Eden.
 London, 1797.
 Statements by counties, various industries.
- 1834-45. Statistical Accounts of Scotland. Contemporary Earnings, and some Retrospective. Edinburgh, 1845.
 2063. q.
- 1836.* URE. The Cotton Manufacture of Great Britain. By Andrew Ure. 2 vols. London, 1836. 2503. l. 13.

 Appendix to Vol. I. contains Cotton Statistics, very complete, for 1833. Vol. II. contains Cotton, 1806–33, Hosiery and Lace.
- Baines. History of the Cotton Manufacture. By Edward Baines. London, 1836. 2063. d. Also 1044, g. 23. Cotton, 1810-32.
- I839. Symons. Arts and Artizans at Home and Abroad. By Jellinger C. Symons. Edinburgh, 1839. 787. e. 24.

 Cotton and other wages, circa 1838. Procured while investigating for the Hand-loom Weavers' Commission, 1837-8.
- 1842. Bischoff. History of the Woollen and Worsted Manufacture. By J. Bischoff. London, 1842.

 1391. k. 14.

Wool, Yorkshire and Gloucestershire.

- 1847.* MACCULLOCH. Statistical Account of the British Empire. By J. R. Macculloch. London, 3rd edition, 1847. 2 vols. 1302. l. 5. 6. Cotton at Manchester, 1840-45, very complete.
- 1851. PORTER. The Progress of the Nation. By G. R. Porter.
 London, 1851.

 Cotton, Lace, &c.

- 1857-8. Strang. Wages in Glasgow. By John Strang. Journal of the Statistical Society, 1857-58. Cotton at Glasgow, 1841-1858.
- 1860. Jubb. The History of the Shoddy Trade. By S. Jubb. London, 1860. 7943. b. 5. Wages in shoddy at Batley, 1858.
- ——* Chadwick. Wages in Manchester, Salford, and the Manufacturing Districts of Lancashire. By David Chadwick. *Journal Stat. Society*, 1860.

Very complete for 1839, 1849, 1859, in cotton, printing and dyeing, silk, and miscellaneous.

(This Paper formed the model on which the Reports of

(This Paper formed the model on which the Reports of Chambers of Commerce to the Board of Trade, published in the "Returns of Wages, 1830-86," were based.)

1866. TIMMINS. The Resources of Birmingham and the Hardware Districts. By Samuel Timmins. London, 1866. 7945. d. 16.
Retrospective and current wages in iron, brass, and metal

wares, &c.

1867.* Felkin. History of the Machine-Wrought Hosiery and Lace. By W. Felkin. London, 1867.

- 1867. Levi. Wages and Earnings. By Leone Levi. London, 1867. 2240. e. 12.
- 1871. Baines. Yorkshire, Past and Present. By Thomas Baines. 1871. 2368. h. 2. Wages at Leeds, 1795 and on. Carpets, &c., 1871.
- 1875. Noble. National Finance. By John Noble. London, 1875. 8226. dd. 3.

 Wages for cotton, 1849 and 1874; wool at Leeds, 1839 and 1874, in Appendix.
- 1876.* Young. Labour in Europe and America. By Edward Young. Washington, 1876. 8277. cc. 30.

 A very complete Report to the U. S. A. Government, but of varying value, for all the chief employments in 1871 and 1874.
- 1877. Bevan. The Industrial Classes and Industrial Statistics. By G. Philips Bevan. London, 1877. 2266. aa. 13.

Textiles, clothing, food, and sundry industries for 1871 and 1876.

1877.* Felkin. Hosiery and Lace. By W. Felkin. Vol. VI. of The British Manufacturing Industries. London, 1877. 2266. aa. 1.

Complete history of these industries, and estimates of earnings at various dates. All Felkin's writings on these trades, dating from 1833 onwards, are valuable.

- 1880. Levi. Report by Leone Levi on Wages in 1878; Year-Book of Facts for 1879. London, 1880. P.P. 1460.
 Comparison of 1866 and 1878, and contemporary accounts for the latter year.
- 1884. Montgomery. Manchester in 1834 and 1884.

 By Robert Montgomery. Manchester Statistical Society, 1884.

 Cotton very complete for these years.
- 1884. NEALE. Condition of the Working Classes in 1857 and 1884. By E. Vansittart Neale. Trans. Social Science Association, 1884. Ac. 2260.

 Wages in 1884 to compare with Chadwick in 1859.
- 1885. Levi. Wages and Earnings of the Working Classes. By Leone Levi. London, 1885. 8276. cc. 37.
- 1886.* Ellison. The Cotton Trade of Great Britain. By Thomas Ellison. London, 1886. 8227. bbb. 4.

 Estimates for various periods, and complete account for 1882.
- 1891. Collet. Women's Work in Leeds. By Clara E. Collet. Economic Journal, 1891.
- Webb. The Alleged Differences paid to Men and Women for similar Work. By Sidney Webb. Economic Journal, 1891.

Also in Problems of Modern Industry. By S. and B. Webb. 1898.

- 1892.* BOOTH. Life and Labour of the People of London. Edited by Charles Booth. London, 1892 and on. 9 vols. 2020. e. Contemporary London Wages, very complete.
- 1893. SCHULTZE-GAEVERNITZ. Social Peace. By G. Von Schultze-Gaevernitz. Trans. by C. M. Wicksteed. London, 1893.
- MERTTENS. The Hours and Cost of Labour in the Cotton Industry. By F. Merttens. Manchester Statistical Society, 1893-4. Ac. 2455.

- Report of the International Textile Congress, 1894. 1894. Webb Coll. British Library of Political Science.
- SCHULTZE-GAEVERNITZ. The Cotton Trade in England 1895. and on the Continent. By G. Von Schultze-Gaevernitz. Trans. by O. S. Hall. London, 1895. 08229. df. 34. History and general account, 1891-2.
- GALTON. Workers on their Industries. Edited by Frank W. Galton. London, 1895. 08275. e. 26. Dressmakers and Tailoresses, circa 1893-4. By Francis Hicks.
- Bowley. Changes in Average Wages in the United Kingdom. By A. L. Bowley. Journal of the Statistical Society, June, 1895.

Index-number of changes in textiles, 1860-91.

- IRWIN. Home Work amongst Women: Report of an 1897. Enquiry conducted for the Scottish Council for Women's Trades. By Margaret Irwin. Glasgow, 1897. Two Parts.
- 1900.* Bowley. Wages in the United Kingdom in the XIXth Century. By A. L. Bowley. Cambridge, 1900. 08282. g. 62.

Cotton very complete, 1806-91. Wool, general history. Discussion of general principles, and methods of tabulation.

- IRWIN. Women's Work in Tailoring and Dressmaking: Report of an Enquiry conducted for the Scottish Council for Women's Trades. By Margaret Irwin. Glasgow, 1900.
- HALSTEAD. Labour Co-partnership and Wages. By Robert Halstead. Read to the British Association, 1900.

Wages for 1891 and 1899 in co-operative works, and 1899 in non-co-operative works compared. Several industries.

Skilled Employments. Reports on Skilled Employ-1900-1. ments for Women, in the Charity Organisation Review.

June, 1900. Upholstery, Boxmaking, Confectionery, Boot and Shoe Trade.

July, 1900. Shirt, Tie, and Collar Making; Dressmaking; Cigar Making.

February, 1901. Bookbinding and Vellum Sewing; Millinery; Laundry Work; Domestic Service. P.P. 1103. caa.

- 1901. Wood. A Glimpse at Wages and Prices since the Industrial Revolution. By George H. Wood. Co-operative Wholesale Society's Annual, 1901.
- 1902.* Bowley. Wages in the Worsted and Woollen Manufactures of the West Riding of Yorkshire. By A. L. Bowley. Journal of the Statistical Society, March, 1902.

 Very full and complete history from 1795.
- Wood. Factory Legislation considered with Reference to its Effects on the Wages of the Operatives affected thereby. By George H. Wood. Journal of the Statistical Society, June, 1902.

APPENDIX B.

ORDERS IN COUNCIL.

THE power to issue Orders dealing with factory legislation was first given to the Secretary of State by the Factory Extension Act, and the Workshop Regulation Act of 1867. Owing to the extension of the Factory Acts to trades hitherto unregulated, it was found impossible to apply one uniform code of regulations to all factories and workshops. The peculiarities of different trades had to be taken into consideration, and some relaxation allowed in certain cases. For this purpose the Secretary of State was authorised to issue Orders modifying the general provisions of the Factory and Workshop Acts "on proof to his satisfaction that the customs or exigencies of trade" required some alteration to be made. But, although the Home Secretary might apply the Orders to any trade, the modifications allowed by the Act of 1867 were definitely laid down in that Act. Overtime was permitted in any trade by Order. The Secretary of State was enabled to sanction the employment of male young persons not under 16 as if they were over 18 years of age, or for 15 hours a day on 72 days in the year (30 & 31 Vict. c. 146, Schedule I. (9), and 30 Vict. c. 103, Schedule (II).

Night work of male young persons might also be allowed by

Order in any trade (30 & 31 Vict. c. 146, Schedule (7)).

The Secretary of State was empowered to authorise the substitution of 7 a.m. to 7 p.m. and 8 a.m. to 8 p.m., as the legal working day, instead of 6 a.m. to 6 p.m. (30 & 31 Vict.

c. 103, Schedule (12)).

He might also, by Order, allow the substitution of eight half-holidays for the legal four whole holidays in the year, or allow holidays to be taken on different days by different sets of children, young persons, and women. Orders might be issued modifying the regulations with regard to the fencing of machinery where it appeared that this was necessary, and

could be done with due regard to the safety of protected

persons (Schedule (25)).

The Home Secretary had power to extend the list of factories in which children, young persons, and women were allowed to remain in the work-room during meal-times, and in which the meal-times need not be the same for all the young persons employed (Schedule (16)).

The number of modifications permissible was increased by

subsequent amending Acts.

In 1870 the Home Secretary was authorised to extend to any trade the permission to employ children, young persons, and women for an additional half-hour when engaged in an

incomplete process (33 & 34 Vict. c. 62, Schedule).

In 1871 power was given to the Home Secretary to exempt Crown establishments from the Factory and Workshops Acts in case of any public emergency, and to permit the employment of young persons above 14, and women, for 14 hours a day in brickmaking and in trades depending on the weather, or subject to seasonal fluctuations (34 & 35 Vict. s. 10, and Schedule I.).

In 1876 the Commissioners appointed to inquire into the working of the Factory and Workshops Acts, went into the question of regulation by Order, and in their Report they

say:---

"When modifications are accumulated in such number and variety as in the present Factory Acts, the whole law assumes a character of complexity and difficulty which is apt to be taken to justify its neglect. These evils are aggravated when, as in most cases under the existing law, the relaxation is granted at the option virtually of the inspectors of factories, the officials who are charged with enforcing the law. . . . The circumstances of different trades are too various and complex to allow us to dispense with all special relaxations of the law. We have endeavoured, however, in the course of our inquiry to discover in what particulars the existing multitude of them might be diminished. All those of which we shall recommend the retention should, we think, be granted in each case upon some intelligible principle which should be embodied in the law, and should in all respects, so far as possible, be made statutory. For this purpose each relaxation should be granted, if granted at all, generally to the trade at large, and not to individual employers. The trades to which it seems proper to extend it should be specified in a schedule, and the reason for which it is granted to them should be embodied in the Act. Power might then be reserved, we think with advantage,

to the Secretary of State to extend the relaxation to other trades and processes in which the same reason could be shown to exist as is specified in the Act in respect of the scheduled trades. Such cases are not likely to be frequent, and should be narrowly scrutinised before the concession is made. We recommend that this power should be exercised by Orders to be laid on the table of both Houses of Parliament, and only to have the force of law, if not objected to by either House, within a certain number of days. By this means we expect that provision can be made for the unforeseen exigencies of particular trades, while at the same time the use of all relaxations will be restricted to cases of absolute necessity." 1

These recommendations were embodied in the Act of 1878. The modifications were given in the form of statutory enactments. The lists of trades and processes to which they applied were in most cases given in the schedules to the Act, and the Secretary of State merely had power to extend those modifications by Order to other trades and processes in which similar

conditions prevailed.

The Factory Bill of 1900 contained clauses which, if passed, would have invested the Home Secretary with powers which

have hitherto been exercised only by Parliament.

It was proposed to repeal the whole of the existing law relating to laundries, and to substitute for the statutory enactments of 1895 a system under which the Home Secretary could, by Order, "apply to laundries... the provisions of the Factory Acts, or any of them, subject to such modifications as may, in his opinion, be necessary for adapting those provisions to the circumstances of the case." ²

It was also proposed to repeal Schedules II. and III. of the Act of 1878, and leave it to the Home Secretary to decide what classes of factories and workshops were to be subject to special

restrictions and exemptions.3

The whole tendency of the Bill of 1900 was, in fact, to substitute a system of Order by the Home Secretary for statutory enactments, and thus revert to the state of things which prevailed between 1867 and 1878, and was condemned by the Commissioners of 1876.

The Factory Act of 1901, however, adheres to the principle laid down in the Act of 1878; and the Home Secretary's power is practically confined to that of extending certain definite

modifications to specified industries.

3 Ibid., sec. 36.

H. C. 1876. XXX., p. xxxvi.
 Factory Bill, 1900, sec. 21.

The Orders which may be issued under the Act of 1901 may be divided into—

Orders extending Regulations.
 Orders varying Regulations.
 Orders relaxing Regulations.

I. Orders extending Regulations.—The most noteworthy example of the Home Secretary's power to extend regulations is in the case of dangerous trades. He may, by Order, certify any trade to be dangerous or injurious to health or dangerous to life or limb, and require special rules to be enforced for the protection of the persons employed. These rules may include regulations prohibiting the employment of, or modifying, or limiting the period of employment for all or any class of persons engaged in dangerous processes (I Edw. VII. c. 22, ss. 79—83).

The Home Secretary has also power to extend the list of notifiable diseases occurring in factories or workshops

(sec. 73).

The following regulations may, by Order, be extended to

other manufactures or processes:-

Section 78, which prohibits a child, young person, or woman from taking meals, or remaining during meal-times in factories or workshops where certain dangerous or unhealthy processes are carried on.

Section 116, which requires particulars of work and wages to

be given by the employer.

The Secretary of State is also authorised to issue Orders requiring the adoption of special sanitary regulations as a condition of the exceptional employment of a child, young person, or woman, either during overtime or at night, and this includes the power to fix the total number of hours of employment in each week, the periods of employment, and the intervals between such periods, which are to be the conditions of the employment of women and young persons at night (sec. 58).

For the prevention of overcrowding, Orders may be issued increasing the amount of cubic space required for each person in any particular manufacturing process, or for any period during which artificial light, other than electric light, is used

(sec. 3).

The Home Secretary has also power to direct that thermometers be provided (sec. 6) and that a specific standard of ventilation be maintained in any class of factories or workshops (sec. 7), and may require certificates of fitness of young persons for employment in certain classes of workshops (sec. 66).

The regulations with regard to lists of outworkers, and the

giving out of work, may be extended by Order to other trades (secs. 107, 108, 110).

II. Orders varying Regulations.—The following variations may be allowed by Order of the Secretary of State when it is "proved to his satisfaction" that "the customs or exigencies of the trade" require that some alteration should be made.

Employment may be taken between the hours of 9 a.m.

and 9 p.m. (sec. 36).

The Saturday half-holiday may be replaced by a half-

holiday on some other day of the week (sec. 43).

The yearly holidays may be given on different days to different sets of children, young persons, and women (sec. 45).

The table in the Cotton Cloth Factories Act, which prescribes the maximum limits of humidity allowed, may be varied, or it may be repealed and a new table substituted

for it (sec. 91).

III. ORDERS RELAXING REGULATIONS.—The modifications as to overtime and night work in the Act of 1901 differ from those in the Act of 1867 in this important particular—that, instead of leaving it entirely to the discretion of the Home Secretary to decide when these exceptions shall be granted, the Act of 1901 embodies the modifications in statutory enactments, and in Schedule II. a list is given of the factories and workshops to which the modifications apply. The modifications may then be extended by the Secretary of State to similar classes of factories and workshops in which overtime is required owing to press of work, the perishable nature of the goods, incomplete processes, or the loss of time in factories driven by water power (secs. 49-52). Thus, wherever possible, modifications and exceptions are embodied in the Act, and the power of the Home Secretary to issue Orders is reserved for cases which could not be foreseen at the time of the passing of the Act.

The same principle is followed out in the case of the special exceptions. Wherever possible, a certain definite limit is laid down beyond which the modification cannot be increased.

The following are examples:-

Section 39, which permits a spell of five hours' work in textile factories under certain conditions. This may by Order be extended to other textile factories when the customary habits of the persons employed therein require the extension thereto of this exception, and if it can be granted without injury to health.

Section 40, which allows exception to the requirement that meal-times should be simultaneous, and meals not taken in a room where a manufacturing process is carried on. The Home Secretary has power to extend this exemption to other trades when special circumstances require, and he is satisfied that it can be done without injury to the persons employed.

Section 114, which exempts from the definition of a workshop a private house or room in which members of the same family are employed in certain handicrafts. This exemption may be extended by Order to other handicrafts when owing to

their light character it seems expedient to do so.

The following are the cases in which exemptions are not embodied in the Factory Act, but may be allowed by Order:—

Section 1, which provides for the limewashing of factories. This may be relaxed by the Home Secretary in any class of factories where it appears that the Factory Act requirements as to cleanliness can be observed without these regulations.

Section 46, which prohibits employment inside and outside the factory or workshop on the same day. The Home Secretary may grant an exception to this regulation when it is proved to his satisfaction that the customs or exigencies of a trade

require that it should be exempted.

În the case of creameries, the Secretary of State may by Order vary the beginning and end of the daily period of employment of the women and young persons, and the times allowed for their meals, and may allow their employment for not more than three hours on Sundays and holidays, provided that the Order shall not permit any excess over the daily or weekly maximum number of hours of employment allowed by the Act (sec. 42).

The arbitrary use of the power of the Home Secretary to issue Special Orders is guarded against by the requirement that all Orders shall be laid as soon as possible before both Houses of Parliament, and if within forty days either House resolves that the Order ought to be annulled, it shall, after that

date, be of no effect.

APPENDIX C.

BIBLIOGRAPHY OF FACTORY LEGISLATION.

I.—THE FACTORY ACTS.

The following is a list of the principal English Factory Acts: an asterisk is prefixed to those which are generally considered to be of especial importance.

- 1802. 42 Geo. III., c. 73. The Health and Morals of Apprentices Act, 1802. (Repealed 1878.)
- 1819. 59 Geo. III., c. 66. An Act for the Regulation of Cotton Mills and Factories. (Repealed 1831.)
- 60 Geo. III., c. 5. (Repealed 1831.)
- 1825. 6 Geo. IV., c. 63. An Act for the Regulation of Cotton Mills and Factories. (Repealed 1831.)
- 1829. 10 Geo. IV., c. 51. (Repealed 1831.)
- —— 10 Geo. IV., c. 63. (Repealed 1831.)
- 1831. 1 & 2 Will. IV., c. 39. An Act to repeal the Laws relating to Apprentices and other Young Persons employed in Cotton Factories and to make further Provisions in lieu thereof. (Repealed 1833.)
- 1833*. 3 & 4 Will. IV., c. 103. An Act to regulate the Labour of Children and Young Persons in the Mills and Factories of the United Kingdom. (Repealed 1878.)
- 1834. 4 & 5 Will. IV., c. 1. (Repealed 1874.)
- 1844*. 7 & 8 Vict. c. 15. An Act to amend the Laws relating to Labour in Factories. (Repealed 1878.)

- 1845. 8 & 9 Vict. c. 29. An Act to regulate the Labour of Children, Young Persons, and Women in Print Works. (Incorporated in Act of 1870.)
- 1846. 9 & 10 Vict. c. 40. (Repealed 1878.)
- 1847*. 10 & 11 Vict. c. 29. An Act to limit the Hours of Labour of Young Persons and Females in Factories. (Repealed 1874.)
- —— 10 & 11 Vict. c. 70. (Repealed 1870.)
- 1850. 13 & 14 Vict. c. 54. (Repealed 1878.)
- 1853. 16 & 17 Vict. c. 104. (Repealed 1878.)
- 1856. 19 & 20 Vict. c. 38. (Repealed 1878.)
- 1860. 23 & 24 Vict. c. 78. An Act to place the Employment of Women, Young Persons, and Children in Bleaching Works and Dyeing Works under the Regulations of the Factories Acts. (Repealed 1870.)
- 1861. 24 & 25 Vict. c. 117. An Act to place the Employment of Women, Young Persons, Youths, and Children in Lace Factories under the Regulations of the Factories Acts. (Incorporated 1878.)
- 1862. 25 & 26 Vict. c. 8. (Repealed 1870.)
- 1863. 26 and 27 Vict. c. 38. (Repealed 1870.)
- 26 & 27 Vict. c. 40. An Act for the Regulation of Bakehouses.
- 1864. 27 & 28 Vict. c. 48. The Factory Acts Extension Act, 1864. (Repealed 1878.)
- 27 & 28 Vict. c. 98. An Act for extending the Provisions of the Bleaching and Dyeing Works Act, 1860. (Repealed 1870.)
- 1867*. 30 & 31 Vict. c. 103. The Factory Acts Extension Act. (Repealed 1878.)
- * 30 & 31 Vict. c. 146. An Act for regulating the Hours of Labour for Children, Young Persons, and Women employed in Workshops. (Repealed 1878.)
 The Workshops Regulation Act, 1867.

- 1870. 33 & 34 Vict. c. 62. An Act to amend and extend the Acts relating to Factories and Workshops. (Repealed 1878.)
 The Factory and Workshops Act, 1870.
- 1871. 34 & 35 Vict. c. 19. (Repealed 1878.)
- —— 34 & 35 Vict. c. 104. An Act to amend the Acts relating to Factories and Workshops. (Repealed 1878.)
- 1874. 37 & 38 Vict. c. 44. An Act to make better Provision for improving the Health of Women, Young Persons, and Children employed in Manufactures, and the Education of such Children. (Repealed 1878.)
- 1878*. 41 & 42 Vict. c. 16. An Act to Consolidate and Amend the Law relating to Factories and Workshops.
- 1883. 46 & 47 Vict. c. 53. An Act to amend the Law relating to certain Factories and Workshops, White Lead Factories and Bakehouses.
- 1886. 49 & 50 Vict. c. 55. An Act to regulate the Labour of Children and Young Persons in Shops.
- 1889. 52 & 53 Vict. c. 62. The Cotton Cloth Factories Act.
- 1891. 54 & 55 Vict. c. 75. An Act to amend the Law relating to Factories and Workshops.
- 1892. 55 & 56 Vict. c. 92. An Act to amend the Law relating to the Employment of Young Persons in Shops. 1
- 1893. 56 & 57 Vict. c. 67. An Act to amend the Shop Hours Act, 1892.
- 1895. 58 & 59 Vict. c. 5. Shop Hours Act.1
- 58 & 59 Vict. c. 37. An Act to amend and extend the Law relating to Factories and Workshops.
- 1899. 62 & 63 Vict. c. 21. An Act to provide for Seats being provided for the Use of Shop Assistants.
- 1901. I Edw. 7, c. 22. Factory and Workshop Consolidation Act.

¹ These three Acts are cited collectively as the Shop Hours Acts, 1892 to 1895.

II.—PARLIAMENTARY PAPERS.

THE principal sources of information after the Acts themselves are the Reports of Royal Commissions and Parliamentary Committees, and other Parliamentary Papers. These are commonly known as Blue Books. Many of them contain voluminous minutes of evidence, Reports of the Commissioners or Committees, tabulated statistical matter, and information in other forms, constituting a mass of material for the study of social and industrial history and conditions, which is apt to embarrass the student by its very abundance. A list of indexes, which may be useful to the student, is given on page 330.

Parliamentary Papers are arranged and bound for use in the libraries of the Houses of Parliament and the principal Government Offices at the end of each Session. There is a distinct set for each House. The papers are arranged in the volumes more or less according to subjects. A "Numerical List and Index" to the papers of each Session is prepared and is always the last paper in the last volume of the set for the Session. The bound volumes, for purposes of indexing, are paged in manuscript continuously right through after being bound. As errors occasionally occur in the pagination difficulties are sometimes experienced in finding a reference from the sessional index, and in the following pages references are only made to volumes. As each volume is preceded by a table of the titles of the papers included in the volume students will have little difficulty in discovering any reference required.

The following abbreviations are used in the following pages:
—H. C., 1814-15, V. signifies "House of Commons Papers,

Session 1814-15, Volume V."

H. L., 1856, L. "House of Lords Papers, Session 1856, Volume L."

*An asterisk signifies a paper of especial importance.

Parliamentary Papers in the British Museum and other libraries are arranged and bound usually (though not invariably) in the same system as those in libraries of the Houses of Parliament.

1803-1818. Account of Cotton and Woollen Mills and Factories entered at the Epiphany Sessions in each year from 1803 to 1818, and Names of the several Visitors appointed by the Justices of the Peace for the same period, under the Act 42 Geo. III., c. 73.

H. L., 1819, XIII.

Contains Reports of the Factories inspected.

1815. Report of Committee on Parish Apprentices, 19 May, 1815. H. C., 1814-15, V.

1816*. Report of Committee appointed to Enquire into the State of the Children employed in Manufactories.

H. C., 1816, III.

This Report is known as "Peel's Committee." An Index will be found in H. C., 1834, L.

1818. Minutes of Evidence taken before the Lords' Committee to whom was referred the Bill for the Preservation of the Health and Morals of Apprentices and others employed in Cotton Mills and Factories.

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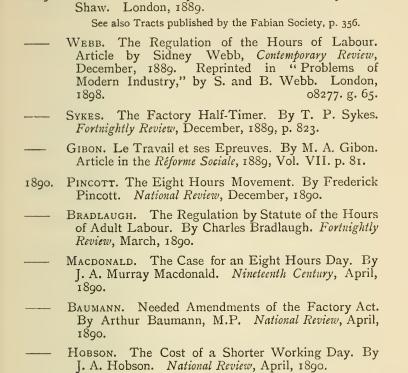
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